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A SPECULATIVE QUARTERLY REVIEW
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DEVELOPMENTAL THOMISM

I. THE PROBLEM

FOR more than four centuries Thomism has been isolated from the main stream of Western philosophy. The specifically modern philosophical impulse originated with Descartes and ran through Leibniz, Spinoza, Locke, Berkeley, Hume, Kant, Fichte, Schelling, Hegel, Comte, J. S. Mill, Schopenhauer, Nietzsche, and Bergson. Scientific and sociological revolutions which parallel those of the Renaissance seem to have occasioned in the present century a new philosophical impulse embodied in such movements as Pragmatism, Philosophical Analysis (including Logical Analysis, Logical Positivism and Scientific Empiricism; the latter two being grouped frequently as Logical Empiricism), Phenomenology, Existentialism and Marxism, roughly describable as contemporary philosophy. Both modern and contemporary philosophy have been largely uninfluenced by Scholasticism in general and

Thomism in particular, and both have influenced Scholasticism and Thomism only slightly.

This enduring separatism has generated more or less typical attitudes. The flourishing inventiveness of modern and contemporary thought has led some Thomists to a smug self-satisfaction, intransigence, and contempt. To what degree this attitude, easy enough to document, of arrogant aloofness is based on a combination of ignorance, and of fear that, in the large philosophical enterprise, Thomism's day is over and has been over for centuries, is difficult to estimate. On the other hand, contemporary philosophers are apt to view Thomism as the anachronism which is the official philosophy of the Roman Church. It seems to lack the free, humble and inquiring mind which is modestly persuaded that serious philosophical work remains to be done in the present and in the future.

This separatism ought to concern the Thomist for three reasons. (1) If one is seriously convinced that Thomism is, in some sense, unique in the history of philosophy, that it is philosophically true in a way that other philosophies are less so, that it bears within itself the progress of philosophy despite the failures of the last four centuries, then one ought to be engaged in enriching it with every valid insight. Now one cannot enrich Thomism with whatever may be true in modern and contemporary thought unless one is thoroughly at home in that thought. (2) To the degree that one is a convinced Thomist one will perceive that the only completely satisfactory matrix in which the discoveries of modern thought find justification is Thomism. Gabriel Marcel, for example, has understood, after his earlier Idealism, that thought is an aspect of being, rather than being an aspect of thought. This decisive truth floats unsuspended in Marcel. But it receives vigorous philosophical justification and enrichment in the Aristotelian-Thomistic epistemology which analyzes knowing as a "becoming other as other." One of the most compelling features of Thomism is this ability to validate the newly discovered truths of recent philosophers. Only one who knows both Thomism and contemporary philosophy is able to see that the deeper

one goes into the latter, the closer one is to the former. (3) Philosophy is a common enterprise, the burden and the joy of all who have given themselves to it. There is, therefore, prior to all philosophical differences, a bond of comradeship, a shared respect for fellow-workers, a sort of brotherhood, between any two philosophers. It is simply part of human nature to be interested in how another "pro" conceives his problems, arrives at his method, explores the possibility of solutions. This professional fellowship makes separation difficult to understand.

Granted, on the one hand, that separatism is a fact, and on the other hand, that, from the Thomist viewpoint at least, it ought not to be a fact, is there any way of conceiving Thomism which predisposes it to that organic intercourse with contemporary thought which ought to replace separatism? Is there some aspect of Thomism which establishes fruitful openness to modern and contemporary philosophy as an implication of Thomism itself?

To that question the present essay suggests the following answer: Thomism is of its very nature organically related to modern and contemporary thought because it is developmental; and further, that contemporary thought has a large role to play in Thomism's development.

II. It is Antecedently Probable that Thomism Is Developmental

The view that Thomism is developmental rather than static, open rather than closed, should surprise no Thomist. The eminent contemporary Thomist, Jacques Maritain, drew attention to this characteristic of Thomism sixteen years ago,[1] and several Popes have proposed it.[2]

Maritain called attention to Thomism's need for growth and self-renewal, and warned that contributing to that need meant, in part, resisting those who would freeze Thomism at a given

[1] Jacques Maritain, *Preface to Metaphysics* (New York, 1940).

[2] Pope Leo XIII, *Aeterni Patris* and Pope Pius XII, *Humani Generis*.

point in its historical development because they failed to understand its progressive character.[3] Just as Thomas had the task in the thirteenth century of renovating the earlier scholasticism, so the twentieth century Thomist must renew the system of Thomas, despite the opposition of conservative Thomists.[4] Maritain described this developmental task in terms of the metaphor of the organic development of a human body [5] in order to suggest the dramatic difference there may be between the earlier and the later phases of an identical Thomism.

This same spirit of developmentalism, of prudent openness and discriminating assimilation, is found both in Pope Leo XIII and in Pope Pius XII. Writing in *Aeterni Patris* the former praised those philosophers who brought to their subject not only scholarship, but also new insights, for, he said, this assisted the development of philosophy.[6] Later in the same document occurs his justly famous plea to make our own, openly and gratefully, whatever of truth has been discovered by anyone.[7] It would be fantastic to refuse to apply this general prescription to contemporary thought.

In a similar spirit Pope Pius XII writing in *Humani Generis* urged Catholic theologians and philosophers not to isolate themselves from contemporary thought but to master it, not only with a view to necessary criticism but also with a view to assimilating whatever may be true in it, and to provoking more profound discussions and evaluation of their own positions.[8] He added that so long as the study of contemporary thought was undertaken in the spirit of profitably developing traditional teaching there would be no ecclesiastical criticism.[9] Tangentially related, at least, to this developmentalism is the freedom

[3] *Preface*, p. 2.
[4] *Ibid.*, pp. 12-13.
[5] *Ibid.*, p. 13.
[6] Leo XIII, *Aeterni Patris;* A. C. Pegis (ed.), *The Wisdom of Catholicism* (New York, 1949), p. 710.
[7] *Ibid.*, p. 713.
[8] Pius XII, *Humani Generis* (N.C.W.C. trans.; Washington, 1950), par. 9, p. 5.
[9] *Ibid.*, par. 10, p. 5.

of the Catholic who is a philosopher. There are many philosophical questions which do not touch matters of faith or morals and in these matters each philosopher is free to adopt his own position.[10] Even in those portions of philosophy in which the Church does have a stake, the philosopher is free to develop Thomism in the light of the results of intellectual progress.[11]

That Thomism does develop seems to be the mind of these two pontiffs. The problem remains, however, how intellectual, and specifically philosophical, development occurs.

III. Newman's Analysis of Development in the Intellectual Order

The classic study of how ideas develop is John Newman's *The Development of Christian Doctrine*.[12] The first chapter of that epochal study, " The Development of Ideas " investigates the process and the kinds of development to which an idea is subject. The fifth chapter, " Genuine Development Contrasted with Corruptions," lists and analyzes seven notes whereby a true development of an idea may be distinguished from a corruption of it. The other chapters apply to Christian Doctrine the general theory of development laid down in these two.

I propose to summarize here Newman's general teaching on the development of ideas as found in his first and fifth chapters, and to suggest that it supplies a methodology for determining philosophical as well as doctrinal developments.

A. *The Process and the Kinds of Development of Ideas in General.*

1. An idea may be said to have life, that is, to live in the minds of those who receive it when, because of its human significance, it becomes an active principle within those minds,

[10] *Ibid.*, par. 30, p. 13.
[11] *Ibid.*
[12] (Harrold ed.), New York, 1949.

leading to a continuing study of its implications and applications.

2. Such a humanly significant idea has many aspects and will therefore mean different things to different men. No one mind will, at first, grasp adequately the full comprehension of the idea. There is a resultant agitation, confusion, conflict as to its meaning, even among those receptive to it.

3. Gradually, definite sets of teachings cluster around the new idea. These sets of teachings will conflict with, augment, and interpenetrate each other until a homogeneous and rounded teaching emerges which enables any one mind to grasp unitedly all the diverse aspects of the idea, which distinct aspects originally existed only in distinct minds.

4. This idea, now developed into a doctrine, is next judged in relation to the other intellectual convictions of those who hold it. It must find its place in the world-view of its recipients and, in this respect, have an influence on their actual living. All the consequences the idea now entails are, in fact, only what the idea meant from the beginning. On the other hand, this process is a corruption rather than a development if its final status did not really belong to it from the beginning.

5. In the process of development into a teaching, into a part of the recipient's world-view and hence into a regulative principle of his living, the given idea necessarily modifies other ideas. It exists in a dynamic tension with other ideas to which it gives new meanings, which it tends to assimilate to itself, and from which it tends to cast off what is inassimilable. Its self-identity is predicated not on isolation, but on assimilation.

6. The developing idea is itself modifiable by surrounding ideas. This testing process, this trial by competition, this struggle of each significant idea to become the dominant idea assimilative of others, or wrecking such others as are incapable of being assimilated, may cause the perversion or even the destruction of any given developing idea.

7. These risks of perversion and destruction must be run if the idea is, in the full meaning of the phrase, *to make a difference,* to be significant. It must be tested in fields of intel-

ligibility which, at first glance, seem totally alien to it, for adaptability is a mark of life. On this planet, for ideas, as for all living things, to live implies to change, and robust life implies marked capacity for change which is, paradoxically, the condition for earthly self-identity.

Such is the process according to which an idea develops.[13] The kinds of development open to an idea are: political, logical, historical, ethical and metaphysical.[14] No doubt philosophy would be interested primarily in the last two types, but probably it could not afford to overlook the other three.

B. *Seven Notes Distinguishing the Development of an Idea from its Corruption.*

1. *Preservation of type.*

Any organism varies considerably as between its primitive and its adult stages, but throughout those variations it remains specifically and even individually the same organism. Similarly, considerable alteration in the aspects of an idea are perfectly consistent with its abiding self-identity. A given idea may remain constant though the expressions of it vary. The mere fact of variation in a developing idea is no evidence of corruption.

One can go even further and say that often enough an idea which is being corrupted may bear a closer external resemblance to its original than one which is genuinely living out the implications of its original. When, under Augustus, the Roman city-state ceased to be a republic and became in effect a monarchy, there was very little superficial change but a profound constitutional corruption had occurred. On the other hand, when Diocletian replaced the trappings of republicanism with the outward show of kingship, the real constitutional change was slight but the superficial change was great.

Not only can profound corruptions preserve external likeness to the original but—and this is a cardinal point—*the refusal*

[13] *Development*, pp. 34-38.
[14] *Ibid.*, pp. 38-50.

to permit the development of an idea is itself a corruption of that idea. To freeze an idea at a given moment of its historical development, to refuse to let it live out the implications it bears within itself, to naysay its life, and obstinately to conceive it according to some past mode, is to pervert it. So—this is my example, not Newman's—to arrest Thomism at any point in its history is to betray Thomism. For Thomism is a habit of *thinking.* Should one refuse to think, preferring instead to *remember* what the master thought, then one is, of all men, the least Thomistic. The letter-perfect conservative Thomist is the most subtle, and, therefore, the most dangerous, corrupter of Thomism.

2. *Continuity of its principles.*

Doctrines expand differently according to the differences in the minds in which they fructify. That is, a common principle may, in different minds, issue in conclusions which are diverse without being contradictory. What is required of a true development is that the doctrine, that is, the teaching, the conclusions clustered around the original idea, preserve that principle or original idea intact. To adhere to a doctrine which has lost contact with its animating principle is mere show, is unenlightened conservatism, is a form of corruption. An idea has developed only when the teaching surrounding it is animated through and through by the original idea. So, for example, any mind which adheres to the conclusions of Thomism but is not animated by the sense of personal appropriation of truth, and personal responsibility towards it, any mind which does not acknowledge that intellectuality and freedom mean that each philosopher must appropriate being itself within himself and deliver its utterance within him, has corrupted Thomism by accepting the doctrine while renouncing the principle.

3. *Power of assimilation.*

To live is to grow. To grow is to have assimilated. To assimilate is to take in and make one's own, selectively, of course, that which is initially other than oneself. A living thing, or a

living idea, makes its way by interpenetrating that which is foreign to itself, and develops by absorbing it. This capacity for expanding is a measure of life. Development is precisely a capacity for union, for assimilation, through which the many become one. For an idea to incorporate the external into itself is the reverse of corruption: it *is* development. Further, that idea A tends to draw to itself ideas B and C rather than ideas D and E is proof not that A is being corrupted by B and C but only that it had a connatural sympathy with them all along. If, for example, Thomistic political principles are especially congenial to those ideas and practices which are named democracy, this does not mean that democratic Thomists are corrupting Thomism into an *apologia* for democracy, but only that, all along, unknown to Thomas himself, his political thinking was particularly at home in a democratic state.

4. *Logical sequence.*

Logic is not the means through which ideas develop in the minds of those who receive them, for the simple reason that there is no one right method according to which an idea fructifies. This fructification process varies considerably, being personal, meditative, rather than inferential.

But given a development as already accomplished, then logic is a technique for testing the fidelity of the development to the original. That is to say, the role of logic in the development of an idea occurs not in the phase of invention or discovery, not in the process of actually developing the idea, but in the phase of evaluation or judgment, in the process of testing the validity of the already achieved development. Logic arranges what it could not discover. Development itself transcends logic, without violating it.

5. *Anticipation of its future.*

A development of an idea is a bringing out, an explication of what is in it from the beginning. Hence it is not surprising that it sometimes happens that early in the history of an idea's development there should be fragmentary anticipations of ful-

fillments which will be achieved in a systematic way only later. There is no discovered law according to which the different phases of a given idea must be developed in the consciousness of men. Hence early gropings toward late achievements are natural. Such early anticipations of subsequent developments are a sort of assurance that the later developments were implicit in the idea from the beginning.

6. *Conservative action upon its past.*

When it happens that a later historical phase of an idea contradicts the earlier phases, that is corruption and not development. A genuine development always conserves prior stages of the development and adds to them. Development is not necessarily in a straight line, but it is certainly not a line which undoes itself. So, for example, any attempt to " develop " the Thomistic notion of being by assimilating to it the Sartrean notion of existence would be a corruption because the latter notion undoes the character of essence, of intelligibility in the existent, which is central to the Thomist notion.

7. *Chronic vigor.*

The development of an idea is, lastly, characterized by enduring vigor. The duration serves to distinguish development from rapid corruption, whereas the vigor serves to distinguish development from slow decay. So, for example, the late nineteenth century notion of the inevitability of progress corrupted quickly before the onslaught of the facts of twentieth century living. Corruption is quick, development is slow. On the other hand, decay is gentle, even genteel, unlike development which has a certain lustiness. So the notion that liberal education ought to be reserved to a given sociological class is unobtrusively dying out in America.

Such are the seven notes which differentiate development from corruption in the realm of ideas. One may be sure of the self-identity of a given developing idea if its progress includes all seven characteristics.[15]

[15] *Ibid.*, pp. 157-191.

IV. The Kinds of Development in Philosophy

A. *Systematic Development.*

By a " systematic " [16] development in philosophy I mean an apparently sudden deepening of the human grasp on philosophy in all its parts, a development of philosophy as a whole. Such over-all developments are relatively rare, but they do occur. So I should, for my own part, judge that the philosophy of Plato is a systematic development over that of the Sophists and Parmenides; that the philosophy of Aristotle is a systematic development over the materialism of the Pre-Socratics and the formalism of Plato; that Plotinus represents a systematic development over both Roman Stoicism and Greek metaphysics; that Augustine's thought is a systematic development over both Plotinus and the Christian Apologists; that Thomism is a systematic development over both Augustinianism and Aristotelianism; that Kantian criticism is a systematic development over both empiricism and rationalism; and that Bergson's vitalism is a systematic development over both idealism and positivism.[17] In such cases philosophy moves forward as a whole and, more or less, in all parts.

B. *Fragmentary Development.*

These dramatic over-all developments are infrequent, and presuppose another, more primitive type of development, the development of a single philosophical idea. So the idea of matter in the Pre-Socratics is the idea of the abode, the subject, of the various contraries. This develops in Plato into the idea of a non-being which in a certain way exists, that is, into the idea of the existing non-being. This in turn develops in Aristotle into the idea of first matter, that is, into the idea of pure potency in the order of essence of corporeal substances. This

[16] The meaning of " system " in philosophy, and of " open " and " closed " systems needs exploration, but this is not the place for it.

[17] Such examples of systematic development are not an implicit commitment to the Hegelian triad of thesis, antithesis and synthesis endlessly repeated.

notion of potency is developed by Aquinas into the notion of essence as potency in the order of existence and substance as potency in the order of operation.

Again, the Stoic idea of natural law as the Divine Logos immanent in the universe is developed by Aquinas into the idea of the Eternal law as immanent in created things; Eternal law, in turn, being an aspect of the Divine Providence. This essentially theocentric conception of natural law is developed on the level of operation in turn by Adler and Maritain into the idea of normality of functioning, of natural tendency as it emerges into the realm of the free spirituality of man. Similarly the idea of knowledge develops from a theory of corporeal images in the Pre-Socratics, to reminiscence of pure forms in Plato, to " becoming other as other " in Aristotle.

This modest type of development is more common than the systematic. To it men of mere ability, as distinguished from philosophical genius, may and do contribute. It is the field of operation of those philosophers who, on the one hand, must do their own thinking (how else shall they be philosophers?) but who, on the other hand, cannot seriously envisage themselves as the culmination of the history of philosophy to date. Their work is problem-centered rather than system-centered, and they leave to the rare genius whom Providence occasionally provides the synthesis into systematic development of their separate, fragmentary developments.

V. The Status of Thomism Relatively to Development

A. *Thomism Has Been Subject to No Systematic Development.*

That there have been systems of philosophy, in some sense of the word " system," since Aquinas is clear enough: Cartesian rationalism, Lockean empiricism, Kantian criticism, Hegelian idealism, Comtean positivism, Nietzschean voluntarism are examples. What is alleged here is that none of these systems is a decisive, over-all development relatively to the system of

Aquinas, despite the fact that each of these systems, very probably, contributed fragmentary developments to Thomism.

The documentation of the judgment that Thomism is philosophically superior to any of the systems which followed it is a lengthy historico-comparative process which cannot be undertaken here. There is only one way to reach such a judgment, and that is to acquire a first-hand knowledge of Thomism and of all the major subsequent systems of philosophy, and then on the basis of explicit criteria, to institute a comparative investigation into the merits of each. The man who commits himself to Thomism on any basis other than this comparative evaluation may very well be a Thomist but he is no philosopher. (If this implies that there are relatively few Thomist philosophers, and that these few become such only towards their middle years, I should not be inclined to shy away from either implication.)

The position that Thomism is, on demonstrable grounds, truer, closer to reality as experienced, more fertile, its parts more perfectly integrated, vaster in its scope, profounder in its principles, more open both to lower and to higher sources of truth, more readily assimilative of new knowledge, yet more surely preservative of ancient and medieval knowledge, more humble in its approach to being, more respectful of it, yet more successful in its metaphysical structure—this conviction, which is my own, must not be pushed too far. It is one thing to say, on the basis of the evidence as we see it, that Thomism is the most satisfactory system of philosophy to date. It would be quite another thing to say that it is the last word in philosophy. We can never close our minds to the possibility that, in the Divine Providence, Thomist philosophy is, in the future, to be surpassed. In that event the very love of truth which today makes us Thomist would tomorrow make us philosophers of that surpassing school. But, on the other hand, we should not exaggerate, either, this mere possibility. Our obligation is to live in the present, not in the future. And to many of us, at least, it appears that the only present way of reaching the depths of being is through Thomism.

B. *Thomism has been Subject to Fragmentary Development.*

The actual demonstration that a given philosophical idea has in fact developed is a detailed historical study which would include at least the following steps:

a) the isolation of the precise content of the idea in question at the two moments between which development is alleged to have occurred;

b) the charting of the most significant advances in the development of the idea between the two terminal dates;

c) a determination that those advances did nor did not substantially coincide with the process of development depicted by Newman and summarized earlier in seven steps;

d) to be sure that the change in question was a development rather than a corruption it would, lastly, be necessary to test that change by the seven notes which distinguish a development from a corruption.

Such a study is not undertaken here. Rather, there is simply listed at random a group of ideas in which it appears likely to the writer that the contemporary phase of these ideas is an development relatively to their status in the writings of Aquinas.

1. *The philosophy of nature.* The very concept of a philosophy of nature as distinct from the empiriological sciences of nature is an advance, a development by way of purification, over the Thomistic notion—I do not say for a moment that it was a *specifically* Thomistic notion—of " Physics " as the single study, simultaneously scientific and philosophical, of changeable being. This development is, as a matter of fact, many-sided, full of ramifications, most of them occurring in Epistemology, specifically in the philosophy of science. It advances even the Thomist teaching on the degrees of abstraction,[18] which Aquinas had already developed notably relatively to Aristotle.

2. *Epistemology.* The critical assessment of knowledge

[18] *Commentary on the " De Trinitate " of Boethius*, q. 5.

necessary for a complete metaphysics exists in Aquinas, notably in his examination of the judgment. But it has received in the post-Kantian period a unity and roundedness, a scientific explication which it does not enjoy in Thomas. What has developed here is the very idea of Epistemology itself—what Epistemology is.

Another development in this area is the statement and critical examination of the principle of sufficient reason which contemporary Thomists are accustomed to undertake. This principle, listed in *Humani Generis* [19] as one of the fundamental truths of philosophy was, so far as I know, first proposed by Lebniz. Undoubtedly the principles of identity and causality as found in Aquinas can be so understood as virtually to contain the principle of sufficient reason. But the explication of it, and its indirect defense by reduction to the principle of identity is an advance.

It is possible—I claim no more than possibility—that, quite unconsciously, a man who was no Thomist developed one Thomistic idea during the last century. Thomas draws a distinction between the sensio-intellectual knowledge of existent singulars and the merely intellectual knowledge of abstracted essences. The first is more perfect than the second, and indeed the second exists only for the sake of the first.[20] Now Newman's distinction between real and notional knowledge [21] may, despite the imperfection of Newman's terminology, parallel and enrich the Thomistic distinction.

3. *Ontology.* What is now the standard Thomistic way of explaining the central metaphysical teaching, the analogy of being, would seem to be a development, due largely to the work to Cajetan, over Thomas' own handling of this problem.

Similarly, recent discussions of being and existence growing out of the Thomist evalution of Existentialism may have deepened the existentialist dimension of the Thomist notion of being.

[19] Par. 30, p. 13.
[20] *Summa Theologiae*, I, q. 84, a. 7.
[21] *Grammar of Assent* (Harrold ed.; New York, 1947), pp. 29-34.

4. *Moral philosophy.* It was suggested above that the idea of natural law has received a specifically philosophical development at the hands of Mortimer Adler [22] and Jacques Maritain.[23] Aquinas treats this idea in a manner that is formally theological and only materially philosophical. Adler and Maritain, who begin their study on the level of law operationally viewed, actually work out in part a *philosophy* of natural law.

Closely related to this new angle on natural law is a development in the idea of natural rights. New attention has been given to man's rights in such fields as his work, his citizenship, his education and, more generally, in the economic, political, social and cultural orders.[24]

5. *General.* Yves Simon's discussions of authority, of the moral problems posed by technological society, and of general Thomistic political notions; [25] M. C. D'Arcy's study of love [26] and his attempt to fuse Newman's philosophy of religion with Thomas'; [27] Maritain's extension of the Thomist notion of connatural knowledge from theology to philosophy, and especially to the philosophy of art,[28] as well as the same author's philosophy of culture [29]—all of these would seem to be developments of Thomistic ideas.

Such a list is suggestive only. It seems highly likely that developments have occurred in additional areas, particularly in logic, which are not here discussed. It seems certain that each alleged development would need careful documentation, as indicated at the beginning of the present section, before it could be unhesitatingly accepted as a genuine development.

[22] *A Dialectic of Morals* (Notre Dame, Indiana, 1941), pp. 47-69.

[23] *Man and the State* (Chicago, 1951), pp. 84-95.

[24] Maritain, *The Rights of Man and Natural Law* (New York, 1947).

[25] *Nature and Functions of Authority* (Milwaukee, 1948); but more especially *The Philosophy of Democratic Government* (Chicago, 1951).

[26] *The Mind and Heart of Love* (New York, 1947). See especially pp. 292-304.

[27] *The Nature of Belief* (New York, 1931).

[28] "On Knowledge Through Connaturality," *The Range of Reason* (New York, 1953), pp. 22-29; see also *Creative Intuition in Art and Poetry* (New York, 1953).

[29] *True Humanism* (New York, 1938).

VI. The Role of Other Philosophies in the Development of Thomism

As long ago as 1940 Prof. Maritain called attention to the great part modern and contemporary philosophies have to play in the development of Thomism. To the degree that such philosophies lack a proper metaphysical grounding they may be described as potential philosophies. The task of Thomism is to actualize them by assimilating them to itself. Thomism thus has the task of bearing within itself the development of philosophy as such. But it can fulfill this task only to the degree that it has made its own the truths possessed by the potential systems existing in the various periods of its own duration.[30] That is to say, one condition of its present development is the assimilation of modern and contemporary philosophy.

A few years later Maritain turned his attention to the problem of the relations between Thomism and contemporary thought in a more detailed way.[31] There are, he pointed out, two different ways in which Thomism can develop relatively to non-Thomistic philosophies. The first is the way of assimilation or, as Maritain called it, of doctrinal exchanges. This means that the Thomist first makes a detailed, sympthetic study of a given non-Thomistic system of philosophy, e. g., of Pragmatism; second, that he isolates the basic ideas of that system from the total complex, e. g., verification, process, evolution; third, the comparative study of these ideas relatively to the relevant Thomist ideas, e. g., verification relatively to truth; process relatively to immutability; evolution relatively to substantial form; fourth, the enlargement by the Thomist of his own conceptual system through assimilating to it such ideas from the other system which, as a result of this process, are seen to be true.

This development by way of assimilation is similar to

[30] *Preface to Metaphysics*, p. 14.

[31] "Philosophical Cooperation and Intellectual Justice," *The Modern Schoolman* (Nov. 1944). Reprinted in *The Range of Reason* (New York, 1953), pp. 30-50.

Aquinas' own procedure relatively to the then suspected Aristotle. It is an exacting process because it implies a persistent conquest of newly discovered truth. It requires a certain pliability of mind, the ability to go readily from one frame of reference, one system of conceptual signs, to another; it requires judgment to be able to determine which ideas are characteristic of the given system, and which accidental and, with regard to the characteristic ideas, to determine comparatively in what sense each is true, and in what sense false; it requires, lastly, some synthetic ability to see how each new acquisition modifies, enriches, is organically related to the Thomist ideas previously entertained. All this means that the Thomist simply cannot go to sleep.

When the Thomist who is intellectually awake, and therefore assimilative, has completed this process with respect to any given philosophy, he will, very likely, find himself faced with a residue of philosophical propositions in the other system which being false, cannot be assimilated. At the end of assimilation lies irreducible opposition. What then?

Development is still possible, but development of a new kind, called by Maritain "mutual intelligible envelopment." This kind of development of Thomism leaves the non-Thomistic system intact, does not dismember it to appropriate what is true in it. The first step is to lay hold of the central intuition behind the philosophical system in question. This intuition may be wrongly conceptualized and systematized by the very system it animates, and yet be in itself, simply as an intellectual intuition, a valid and a true insight into some aspect of being. So—it is my own example, not Maritain's—one might say that the central, valid intuition behind the pantheism of Plotinus and of Spinoza is the connectedness of being, the unity of being, in some sense of the word "unity." The second step is to allot to that system as a whole its place *within Thomism*, to locate it, for example, as pertaining to the philosophy of nature, or to metaphysics, or to practical philosophy (morals). It may well be necessary, in this second step, to locate the system in a

purely hypothetical manner. So, for example, one would locate the pantheism of Plotinus or Spinoza as pertaining to metaphysics; but not to metaphysics simply speaking, but rather to metaphysics as metaphysics would be if contingent being proceeded from God by way of emanation rather than by way of creation. This second step, then, is one of seeing the opposed system as a whole in its relation to Thomism; of seeing the point of contact even in opposition; of seeing the hypothesis, however false, on which opposition would vanish. The third step is one's return to Thomism with a deepened insight into Thomism itself; with a new understanding of what Thomism does not mean, as well as what it does mean; with an enlarged grasp of the ramifications of one's own position. This is development, not by assimilation, but by deepening. It is Thomism seeing more deeply into itself precisely through seeing into the alternatives, *from the standpoint of the alternatives themselves.* One sees Thomism in an entirely new depth through approaching other systems at the point of their highest intelligibility, which is also the point of the purest intellectual justice. It is through being temporarily and hypothetically a non-Thomist that one develops, in this second way, Thomism itself. It might be inelegantly said that, from this point of view, the study of non-Thomistic philosophy is the back door to Thomism.

This second, and somewhat more subtle, form of development points most sharply the lesson that, even where irreconcilable opposition is discovered, still there is nothing but profit for Thomism in constant intercourse with contemporary thought—the specific profit of development.

VII. Conclusion

It is essential for the Thomist never to confuse development with mere eclecticism, never to confuse the pursuit and the acquisition of truth with merely being "informed." Any sacrifice, any compromise, of the ruling categories of the true and the false would be corruption, not development.

In a remarkable article published two years ago, Prof. James Collins called attention to the fact that ". . . a philosophy can be comprehensive, either in the sense of embracing a variety of *systems about* reality or in the sense of embracing a wide sweep of *real traits* of experience. The former sort of inclusiveness does not necessarily entail the latter. . . . Conversely, a philosophy can claim to include all the factors in our experience of being, regardless of whether this philosophy attempts to adjust several systems of metaphysics to each other. Philosophical adequacy does require that an explanation pass the former test but not necessarily that it pass the latter one." [32] That is to say, Thomism is philosophically true and adequate; as a result it is developmental and comprehensive relatively to other systems. But it is its relationship to being that is primary, and its relationship to other philosophies that are secondary. "The unity of philosophy is rooted immediately in this joint reference toward being as that which has the act of existing, rather than in the second-level relations among systems concerning being." [33] Thomism, then, is comprehensive relatively to other philosophies precisely because true, not true because comprehensive.

Truth and comprehensiveness relatively to reality; developmentalism, and resultant comprehensiveness relatively to other systems of philosophy—such is the right order. Provided this order be observed, the notion of Thomism as developmental is of value. Through it, one can retain his intellectual center, his philosophical integrity, his Thomism, and yet move freely, openly, in the world of thought, having a profound concern with, and a first-hand involvement in, contemporary philosophy. For it is by Divine Providence that we are men, and philosophers, of *this* time, *this* place. Hence the fellow men, and the fellow philosophers, of *this* time, *this* place, have a unique claim upon our love, our brotherhood, our intelligence.[34]

[32] James Collins, "The Problem of a Philosophia Perennis," *Thought* (vol. 28, no. 3), p. 588.

[33] *Ibid.*, p. 593.

[34] A recent exchange between a Pragmatist (Van Cleve Morris) and a Thomist

But even the most ardent developmentalist must acknowledge that the role of the conservative Thomist, of the anti-development Thomist, is legitimate though irritating. Only the very incautious will despise proper warnings of genuine dangers to Thomism in assimilation, development, comprehensiveness. In human affairs—and philosophy is emphatically human—any one tendency, such as development, requires restraint emanating from the opposite tendency, such as conservatism. Yet it is not the spirit of conservatism which will develop Thomism. It is rather the spirit to which Newman gave expression a little more than a century ago.

"The stronger and more living is an idea, that is, the more powerful hold it exercises on the minds of men, the more able is it to dispense with safeguards and trust to itself against the dangers of corruption. As strong frames exult in their agility and healthy constitutions throw off ailments, so parties or schools that live can afford to be rash, and will sometimes be betrayed into extravagances, yet are brought right by their inherent vigor. On the other hand, unreal systems are commonly decent externally. Forms, subscriptions, or articles of religion are indispensable when the principle of life is weakly." [35]

Thomism has the toughness of the living. It can take the rough and tumble of the very unpretty development process and yet retain its self-identity.

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(Robert F. Harvanek) in *Thought* (vol. 30, no. 117), pp. 119-230, reminds us once more of the claim which our contemporaries have upon, at least, our attention.

[35] *The Development of Christian Doctrine*, p. 175.

LOGIC AND MYSTERY IN THE *QUARTA VIA* OF ST. THOMAS

IT may seem that the demonstration of the existence of God has been treated so often that very little remains to be exposed by students of natural theology. By the very fact that these arguments lie in the realm of demonstration we recognize that every normal adult using his power of reason can discover, in one way or another, the necessity of God in the universe. In general, the words of St. Paul to his Greek converts, " The invisible things of God are made known to us through the created universe," [1] can be admitted by all.

Though granting this unquestionably, we must concede that the formal logical process for the complete demonstration is beyond the ability of many people untrained in logic and philosophy. The five demonstrations employed by St. Thomas to reach a first mover, necessary being, first efficient cause, absolute maximum perfection, and first intellect or designer of the universe are powerful accomplishments in the fields of logic, philosophy of nature, and metaphysics yet to be surpassed by the philosophers of any era. St. Thomas was gifted with a mind that seemed to have no difficulty in grasping clearly the relation of the proper to the common, the specific to the generic, the single aspect to the whole. He was able to reconcile extremes and contraries within what is common or total. He resolved those problems which for more limited minds constituted paradoxes and seeming contradictions because he knew how to distinguish, analyze, compare, identify and unite better than most minds. Above all he recognized and admitted where mystery enters, marking the boundary line for mere reason.

There is a medieval saying, " *Omnia exeunt mysterium*,"—all things pass into mystery,—which seems to have been given more consideration by St. Thomas and many of his contem-

[1] Romans 1: 20.

poraries than it has by most modern and contemporary philosophers. It is actually the quasi-mysterious thing that leads us on towards the more complete mystery—somewhat as the partial leads to the whole, and the limited to the unlimited. It is a fact that the intellect would not even begin to search logically or analogically for the completely mysterious cause of the universe unless it had first perceived a relationship (afterwards discovered to be necessary) between some mysterious phenomena in the universe of nature and this unknown Principle. Surely no one is so rash as to claim that he thoroughly and clearly understands such naturally mysterious phenomena as movement (as yet undefined essentially by either science or philosophy), derived or participated being, secondary efficient causes, essentially diversified transcendental perfections, and the ordering to ends found in finite beings. If anyone makes such a claim he is either so naïve as to be " skirting around " the question or incapable of catching the mysterious elements which have baffled great minds for centuries.

Josef Pieper has recently emphasized the fact that the beginning of philosophy lies in man's ability to find wonder, " to marvel at " mysterious reality, so glibly taken for granted by the superficial minded. He points out that the capacity to wonder is one of man's greatest gifts and he deplores the fact that modern philosophy has substituted doubt for the normal movement of wonder.[2] " Wonder signifies that the world is profounder, more all-embracing and mysterious than the logic of everyday reason had taught us to believe. The innermost meaning of wonder is fulfilled in a deepened sense of mystery. It does not end in doubt, but is the awakening of the knowledge that being *qua* being is mysterious and inconceivable, and that it is a mystery in the full sense of the word." [3] Peiper goes on to show that in the state of wonder one is not in a state of resigned ignorance, but searching for truth and on the way to it. One does not know fully or conceive satisfactorily some truths because, as St. Thomas reminds us, " the cause of our

[2] Josef Pieper, *Leisure, The Basis of Culture* (New York, 1952), p. 133.
[3] *Ibid.*, p. 135.

wonder is hidden from us." [4] In another place the Angelic Doctor defines wonder as "*desiderium sciendi*"—the desire or longing for knowledge. Pieper comments on the fact that St. Thomas beheld in man's attraction to wonder the very beginning of his quest for God. "Furthermore, Aquinas held that man's first experience of wonder sets his feet on the ladder that leads up to the beatific vision. And the truth that human nature is intended for no less an end is revealed by the fact that we are capable of experiencing the wonder of creation." [5] Reason should certainly make it clear that the effects which lead to an absolutely mysterious cause must themselves have something mysterious about them in order to, first, engage the human mind in such a quest, and secondly, to be able to "stand for" in a significative way, the name for God.

Now, this is not in any way to deny or belittle the service of logical method and discipline. Indeed, before we finish we shall have rigorously to employ dialectics and the logical processes of both induction and deduction. But it is well to emphasize at the outset the need of recognizing mystery when we meet it and the limitations of the discursive process so closely associated with the imagination and so necessary to progress in both mathematics and the physical sciences. St. Thomas was full of dialectical ingenuity but he certainly did not stop there. He knew that the human mind was made for more than problem solving and syllogistic reasoning; that its movement is "three dimensional" in penetrating ever more deeply the mystery of being. For the Angelic Doctor, human thought extends radially and penetratively into ever widening circles. Linear inference is not an adequate instrument for that enlightenment which is more a progress towards pure understanding than a progression of demonstrations.

Nothing is ever gained by attempting to accomplish too much at once. It would require at least a complete volume to treat of St. Thomas' five ways of demonstrating the existence of God. It is my purpose to treat of but one which is considered

[4] *Ibid.*, p. 136.
[5] *Ibid., loc. cit.*

by some as the most complex of the five, viz., the *quarta via*. For the sake of order the treatment will fall into three divisions The first will include the steps of observation and comparison which belong to the process of induction. In this part the mind is led to posit a maximum measure of perfection, that is, a name for God which will ultimately be used as a significative definition and the middle term in demonstration. The mysterious and varied degrees of existing transcendental perfections lead the intellect dialectically to a supereminent Principle. That this is not a form of the " ontological proof " will be made clear.

The second part will follow the general inductive procedure of hypothesis and analysis. The supereminent Principle which has been reached through abstracting the relationship analogous to that of part to whole, here precisely that of limited to unlimited (and completely mysterious) perfection, will be recognized as the hypothetical principle. As in any inductive work, the principle is granted hypothetically before the analysis of participating and participated perfections (or the degrees and the absolute norm) establish such a principle as necessary. It will be seen that the foundation for the relationship of such effects to such a cause lies in the property of dependency discovered in the participating perfection. In treating of such transcendental concepts, reason moves on the metaphysical plane, making use of analogy of proportionality in the acts of comparison and analysis.

Lastly, we must show through an *a posteriori* demonstration in which we proceed deductively that an absolute maximum perfection exists as the first Efficient Cause and first Exemplary Cause of the essentially varied degrees of transcendental perfections found in things in the universe. The method employed in this part corresponds with the last step in general induction, i. e. verification. In order to complete the whole process of reasoning the induced law or principle must finally be demonstrated by syllogistic inference.

A Maximum Measure of Perfection is Posited

By observation and comparison of things we discover that the very perfection of existence (*esse*) of creatures and concomitantly, the attributes of goodness, unity, beauty, etc., are found in an ordered hierarchy of distinctly different degrees. The existence of a stone, a pine tree, a bird, and a man or the goodness of steel, bread, sheep, and men differ essentially. Such an ascending scale of perfection points to a maximum which will be sought as the ultimate measure of these varied attributes. For a certain measure or norm is the only real basis for any comparison of more and less. Now, the maximum for the transcendental perfections of being is obviously not one that can be observed in the physical universe but must be sought in a higher order of being—on the level of metaphysical reality.

In his brief original statement of the *quarta via* St. Thomas has clearly outlined this dialectical ascent to the highest or absolute subsisting Perfection.[6] But he has not included in this particular question all of the evidence to be used in demonstrating the existence of the maximum perfection as the first cause of all derived being and the perfections which follow being. Yet he has expressly given these arguments in other works, notably, the treatise on creation in both the *Summa Theologiae* and *De Potentia,* and again in the *Contra Gentiles* and the *Commentary on the Sentences.*[7]

In the *quarta via,* just as in the other four Thomistic proofs

[6] *Summa Theol.*, I, q. 2, a. 3. Invenitur enim in rebus aliquid magis et minus bonus et verum et nobile; et sic de aliis huiusmodi. Sed magis et minus dicuntur de diversis secundum quod appropinquant diversimode ad aliquid quod maxime est; sicut magis calidum est, quod magis appropinquat maxime calido. Est igitur aliquid quod est verissimum, et optimum, et nobilissimum, et per consequens maxime ens; nam quae sunt maxime vera, sunt maxime entia, ut dicitur (*II Met.*). Quod autem dicitur maxime tale in aliquo genere, est causa omnium quae sunt illus generis, sicut ignis qui est maxime calidus est causa omnium calidorum ut in eodem libro dicitur. Ergo est aliquid quod omnibus entibus est causa esse et bonitatis et cuiuslibet perfectionis et hoc dicimus Deum.

[7] *Ibid.*, q. 44, a. 1; *De Potentia*, q. 3, a. 5; *I Cont. Gent.*, c. 13;*II Sent.* d. 1, q. 1, a. 1; and in *In Joan., Prologus.*

for the existence of God, the principle of proper causality is applied. There is nothing unique in this. The uniqueness of each way lies in the particular fact of experience to which it refers, that is, the mysterious phenomena of nature which incite wonder in the human mind. Thus man is led to seek the ultimate principle and cause of such phenomena. In the fourth way this fact of experience concerns perfections in beings not attributable to the generic, specific, or individual potentialities of their natures. The proof begins with the first and most formal of all perfections, that of existence (*esse*) of beings in act: " Among beings (things that are) some are more and some less good, true, noble and the like." [8] A thing must first have being before it can actually possess other perfections, whether they be transcendental as nobility, goodness, and truth or univocal perfections possessed by reason of generic and specific natures such as animality and rationality in man.

Now in contrast with univocal predicamental perfections discovered within natures and measured by the highest species within genera, the maximum measure for strictly transcendental perfections must be sought above and beyond things of the corporeal universe. For if being itself is not limited to the plane of sensible things, the same is true of goodness, unity, truth and the like. And if they are to be realized in their complete fullness it must be in the absolute state of which they are formally capable. It is this which must constitute the supreme measure and include the total concept of the perfection. As the maximum of transcendental perfection it must exclude all imperfect realizations. This necessarily excludes the varied and limited states in which it is found in finite beings. Even in quantitatively measurable things, which always involve more and less, there is no real comparison without a certain norm considered as the most perfect measure.

Logically we are led to seek the maximum wherever there are degrees of the same perfection. As long as something of act or perfection of any kind is lacking, the mind seems to demand a better realization of such perfections as existence,

[8] *Summa Theol.*, I, q. 2, a. 3.

goodness, love, freedom, truth, etc., than our experience furnishes us with. We are never satisfied with the particular good. Our intellectual knowledge which is of multiple and restricted truths leaves us dissatisfied and ever desirous of pursuing the whole truth. Above all, the precarious and limited perfection of existence possessed by creatures urges us to seek a more perfect life, eternal existence. In the psychological order, both appetitively and cognitively we seem to press forward towards the infinite possibilities of such perfections. And we reasonably conclude that the maximum measure must be a supreme and infinite one which formally includes the total concept of the perfection. Metaphysically it is possible to abstract the transcendental perfections from all material conditions and imperfect realizations in the physical order and yet find that they retain their essential constitution. The form not only remains in the higher analogates but seems to be more easily apprehended by the intellect. Indeed, these perfections seem to tend formally towards a state of absolute purity which implies only act.[9] It is only in the order of metaphysical abstraction that the intellect is able to refashion its concepts of perfections obtained in the lower order of physical abstraction, and through analogical insight arrive at the notion of perfection which transcends the physical universe and requires no matter for verification.[10] For example, the concept of intel-

[9] LeRohellic, *Problèmes Philosophiques* (Paris, 1932), p. 136. Quae cum in sua definitione non dicat nisi perfectionem seu actum, non repugnat quominus ab omni subjecto absolvatur in sua simplicitate subsistens, et suam rationem formalem servet in gradu infinito.

[10] *Summa Theol.*, I, q. 12, a. 4. Cognitio enim contingit secundum quod cognitum est in cognoscente secundum modum cognoscentis. Unde cujuslibet cognoscentis cognitio est secundum modum suae naturae. Si igitur modus essendi alicujus rei cognitae excedat modum naturae cognoscentis oportet quod cognitio illius rei sit supra naturam illius cognosentis. . . . Relinquitur ergo, quod cognoscere ipsum esse subsistens sit connaturale soli intellectui divino, et quod sit supra facultatem naturalem cuiuslibet intellectus creati, quia nulla creatura est suum esse, sed habet esse participatum. Also, *ibid.*, q. 84, a. 7. Intellectus autem humani qui est conjunctus corpori proprium objectum est quidditas sive natura in materia corporali existens; et per hujusmodi naturas visiblium rerum, etiam invisibilium rerum aliqualem cognitionem ascendit.

lect is immeasurably more an intellect when freed from the limitations of material conditions. We may also take the concepts of goodness, wisdom, and love as realized in man and refashion these concepts analogically, applying them to higher levels or modes of being, even extending them infinitely. The notion of such perfections formally considered is without limit. They are as unlimited as being itself is and we cannot even positively conceive an excess of their ultimate measure or maximum.

This, then, is the maximum being, the source of perfection posited by St. Thomas in the *quarta via,* as supereminent Principle and Cause of being and the transcendental perfections of being. Now, the fact that we arrive at and accept a maximum being as subsistent Perfection before we prove the existence of such a " Being " may lead some to think that we employ surreptitiously a form of the " ontological " argument. The suspicion would have some foundation if we claimed to arrive at the knowledge of God's existence by the way of supereminence alone, and if we did not distinguish between the orders of knowledge and being. We apply the principle of causality in the actual order once we have accounted for the movements of the mind, in penetrating the real and basic relationship between limited, imperfect, mysteriously participating, and by itself unexplainable, being and the principle from which such being derives. Affirmatively the mind expresses this principle as absolutely pure, i. e., the perfection of Being by essence. Negatively, we purify our limited concepts and designate this Being as devoid of all imperfection. And by way of supereminence we apply this concept and name of maximum Being or first Perfection to Him whom we call God. Were it not for this ability of the human mind to discover transcendental perfections mixed and limited in things and compare essentially different degrees of it, denying infinite perfection to even the highest finite actualization (as in the angels) and, at the same time, affirming the possibility of perfection *per essentiam,* as ultimate principle and measure of

the limited degrees, we should never arrive at the argument from causality as applied in this fourth demonstration. Remembering that principle is to the intellect what end is to the appetite, we find that after proceeding inductively to and positing the *Maxime Ens*, we are able to use this concept and name for God (what we mean by God), as a middle term in the actual demonstration. This, of course, does not occur until the last part.

In this first part the reasoning process is largely inductive since it is concerned so much with abstracting relationships. Induction rests on the law of causality and the law of uniformity in nature. It seems to involve more abstraction than any other form of inference, and it can be applied to any science which has as its object the discovery of universal laws and principles which can explain the cause of some phenomenon of experience. Its starting point is always experience and its goal is to reach the cause which cannot be found immediately or by an unaided act of inference. Compared to formal logical deduction the "logic" of induction seems to be an analogical expression. For it is not a *per se* formalized method of procedure, that is, its methods are not so determined and regulated by purely formal rules as to lead infallibly to certain conclusions. And there is a kind of basic continuity between the lower investigations on the level of sensible experiences and the higher more disciplined levels of inquiry. One who infers inductively depends greatly on his powers of observation, ability for careful comparisons, and constructing plausable suppositions. He must, above all, be able to abstract on different levels, increasing in profundity and mystery, the relations between existing singulars and hidden laws and principles. If he fails in this abstraction, in short, fails to make the proper connections, his supposition or hypothesis is merely gratuitous. Now, once we have abstracted the relationship of limited perfection to unlimited, and in a sense, caught or intuited something of the mystery of finite being and purely transcendental perfections, we are in a position to posit the supereminent Principle which

is held as maximum norm and measure. An analysis then follows which is concerned with participation and the participated perfections. The real foundation for the causal argument lies in the dependency discovered here. Though more vaguely and commonly seen at first, it (dependency) is ultimately discovered to be a necessary property of all finite being (*esse*) and consequently of the transcendental properties of being.

A brief comparison of purely transcendental perfections with univocal generic perfections will show that they are realized in things differently and conceived by the mind differently. It is through a proper understanding of these facts that we avoid falling into either pantheism or anthropomorphism when we attribute the purely transcendental perfections formally and eminently to God. The concept of the generic perfection " animality " is in potentiality to the addition of extrinsic differences for the constitution of its several species. The specifying difference " rationality " is something extrinsic to " animality " and consequently it adds some new perfection to the genus. On the contrary, the concept of a transcendental perfection such as being (*esse*) and its absolute attributes unity, truth, goodness, actually contains, though in an unexplicitated way, its essentially different modes. Nothing extrinsic is introduced when we make explicit some particular mode of the transcendental. The logical contraction of the concept comes from within when we express a distinct mode of being, goodness, unity, etc. All degrees of the perfection are implicit in the common *ratio* and it depends upon the subject of which is it predicated what degree of the perfection is made explicit. It must be recalled here that, according to St. Thomas, the transcendental perfections of being do not add any real relation to it but only a relation of reason.[11] As attributes of being they are as capable of being realized according to all modes, even an infinite one, as being (*esse*) itself is. And if being is never exhaustively realized in finite creatures,

[11] *I Sent.*, d. 19, q. 5, a. 1, ad 4. Ad tertiam dicendum quod verum addit supra ens sicut verum, bonum, et unum; nullum tamen earum addit aliquam differentiam contrahentem ens, sed rationem quae consequetur omne ens.

since even the highest of them have a limiting principle of potentiality, neither are those perfections which necessarily follow being ever exhaustively actualized in creatures.

It is certainly admissable that we do not hold a univocal concept of these absolutely transcendental perfections which formally contain all modes or degrees of the perfection in question. That which we form is an analogous concept possessing only a unity of proportion and our predications must follow according to analogy also. In analogy of proper proportionality is wrapped up the key to understanding some of the mystery of the ordered hierarchy of creatures in the universe. And unless the analogous concept of being is understood and applied correctly, it is impossible to admit true predication of being and its absolute perfections with regard to both finite and infinite being. It is only by reason of the fact that the analogates of being and the other transcendental perfections can be proportionally identified in a common term, intrinsically and formally present in all of them, that demonstrative value can be attached to these terms predicated according to analogy of proper proportionality. In short, the concept of being having only proportional unity, yet always signifying the perfection of being in some mode, among intrinsically different modes, is able to occupy the place of a middle term in a metaphysical demonstration. In another place I have treated more fully the forms of analogy according to St. Thomas, including analogy of inequality.[12] But for the present purpose we shall consider only those forms of analogy which are required for analyzing and understanding those perfections which are ultimately discovered to have as their principle and proper cause infinite Being and Perfection.

The ability of the human intellect to compare qualitative things as well as quantitative, challenges man's measuring power and carries the mind into metaphysical comparison. Thus, in the science of metaphysics we are concerned with transcendental or virtual " quantity " which has reference to

[12] Dissertation: *The Henological Argument For The Existence Of God* (Notre Dame, 1946), Ch. IV.

virtual " amounts " or degrees of perfection as well as power. Whereas predicamental or univocal quantity exists only in corporeally extended things, virtual quantity which follows upon being can be found within all categories and likewise outside of them. St. Thomas asserts that by the very fact that a thing has being or exists, it has virtual quantity as regards its perfection in the order of being, "*ex hoc quod dicitur ens consideratur in eo quantitas virtualis quantum ad perfectionem essendi.*" [13] It is thus that the perfection of form in anything has a certain greatness. In discussing whether or not *habitus* increases St. Thomas affirms:

> Increase like other things pertaining to quantity is transferred from bodily quantity to intelligible spiritual things. . . . In corporeal quantity a thing is said to be great according as it reaches the perfection of quantity due it; wherefore a certain quantity is reputed great in a man which is not reputed great in an elephant. And so also in forms we say a thing is great because it is perfect. And since good has the nature of perfection, therefore ' in things which are great but not in quantity, to be greater is the same as to be better.' (Augustine, *De Trin.*, VI) [14]

In the effects of form which are being (*esse*) and operation, as well as in form itself, we find virtual quantity. For everything has being according as it has form, since form is the principle of natural existence.[15] And every agent operates through its form. Consequently, in the order of being things with more perfect forms have greater " amounts " or degrees of the perfection of existence and in the order of operation such natures have greater power of acting.[16] We see then that transcendental quantity is as real as predicamental quantity and that we may express comparisons or proportions in the metaphysical order as well as in the physical and mathematical orders. St. Thomas makes use of metaphysical proportion or analogy to express proportionate relationship between potency and act, effect and cause, and even between God and creatures

[13] *De Verit.*, q. 29, a. 3.
[14] *Summa Theol.*, I-II, 52, a. 1.
[15] *De Verit.*, q. 27, a. 1, ad 3.
[16] *V Metaphys.*, lect. 18.

asserting: "Although between God and the creature there cannot be a generic or specific likeness, there can nevertheless be a certain likeness of analogy as between potentiality and act and substance and accident." [17] But in such comparisons we must clearly understand that we do not interpret them as we do mathematical proportions, i. e., according to determined distances. The term proportion has been extended from the order of mathematics into the order of metaphysics and it is used to designate any relation of virtual quantity. Actually this is the way that we compare the life, being, powers and perfections in the things around us. And according to St. Thomas: "In this sense there can be a proportion of the creature to God inasmuch as it is related to Him as the effect to its cause and as potentiality to act, and in this way the created intellect can be proportioned to know God." [18]

According to both Aristotle and St. Thomas the unity of metaphysics is obtained by reducing the multiplicity of objects to the analogical unity of being.[19] All beings by the fact that they participate in existence have an entitative ordination to being and to the perfections consequent upon being. All are proportionally one in being, yet every being in respect of its existence is diverse simply from every other being. Thus analogy of proper proportionality is based on the diversity of the act of being and the similarity in all beings between the proportionate or commensurate *esse* and the nature exercising this perfection. The unity of all things in being consists in an analogical community of relations which all beings maintain with one another through their act of being or existence.[20]

In the analogy of proper proportionality it is the notion of proportional likeness which is essential. This is concerned with a likeness of relations existing between pairs or sets of terms in different orders of reality. Thus there is a proportional likeness of relations existing between the proportions, matter :

[17] *De Pot.*, q. 3, a. 4, ad 9; and *de Verit.*, q. 8, a. 1, ad 6.
[18] *Summa Theol.*, I, q. 12, a. 1, ad 4.
[19] *IV Metaphys.*, 1003 a, and *XI Metaphys.*, 1061 a; also *IV Metaphys.*, lect. 1.
[20] *I Sent.*, d. 35, q. 1, a. 4.

form *as* essence : existence, expressed geometrically but interpreted according to metaphysical analogy. We find here not so much something common to the terms in the given comparison, but common to the relationship between the terms in the proportions. Hence St. Thomas characterizes this form of analogy as " mutual likeness of proportions." [21] Such analogy is able to obtain in the order of infinite as well as finite reality, and we may say, Infinite Being : Its existence *as* finite being : its existence. Uncreated Being is able to exist according to its proper mode, i. e., of itself, and created being according to its proper mode, from another.

In discussing whether knowledge is predicated equivocally of God and man, St. Thomas sets forth the fundamental characteristics of several forms of analogy which must be applied in a study of the relationship of creatures to God.[22] Analogy of attribution is distinguished from analogy of proportionality chiefly by the fact that in the former the perfection or form signified by the name is found only in the primary analogue and attributed by the mind to the minor analogates by reason of some relationship such as causality; whereas, in proportionality the signified form exists intrinsically in all of the analogates according to a relation of proportion. According to St. Thomas analogy of attribution is to be predicated in a twofold manner. In the *De Potentia* we find a description of these and the correct application of one type only to God and creatures:

> Now this kind of predication is twofold. The first is when one thing is predicated of two with respect to a third; thus being is predicated of quantity and quality with respect to substance. The other is when a thing is predicated of two by reason of a relationship between these two; thus being is predicated of substance and quantity. In the first kind of predication the two things must be preceded by something to which each of them bears a relation. Thus substance has respect to quantity and quality, whereas in the second kind of predication this is not necessary, but one of the

[21] *De Verit.*, q. 2, a. 11. Similitudo ad invicem proportionum.

[22] *Ibid.*, q. 3, a. 11.

two must precede the other. Wherefore since nothing precedes God, but He precedes the creature, the second kind of analogical predication is applicable to Him but not the first.[23]

It seems that the first type of analogy (*multorum ad unum*) must be excluded from predication of God and creatures for it would mean that we are predicating as though they were both minor analogates under the universal concept of being, viewed as the primary analogue. And thus it would be prior to the being of God, Himself. Likewise, the second type of analogy (*unius ad alterum*) as applied to God and creatures is different from this analogy as applied to two creatures. For example, when we apply "healthy" to medicine and to the person in whom it helps to cause health there is truly an extrinsic denomination since health is found intrinsically only in one analogate and attributed by the mind to the other by reason of the relation of causality. Now, these terms healthy medicine and animal health in a man are proportionate to each other according to a certain determined ratio, though, of course, not in the sense of mathematical ratio. But with regard to God and creatures there is an analogy of attribution founded on the causal relationship with no possibility of a determined ratio. For the form or perfection of being, goodness, love, wisdom, etc., which we know and name from creatures, must be intrinsically present and absolutely subsisting in an infinitely perfect Being if it is to be accepted as the absolute Maximum Perfection. And it is this Being that we have posited as the supereminent Principle after completing the processes of observation and analogous comparison of some of the mysterious transcendental perfections of existing creatures.

Whereas in creatures these perfections are accidentally present in their natures, in the first and maximum Being, perfections are not said to be had or possessed but rather Perfection constitutes Its very nature. As we shall see in the actual proof of God's existence, God Who is being, goodness, love, causes like effects in beings proportionate to their natures and modes

[23] *De Pot.*, q. 7, a. 7.

of being. Such effects are capable of manifesting only imitatively and inadequately subsistent Perfection. St. Thomas declares many times that these effects fall short of the power of the Cause. And we shall also see that it is necessary to make use of both analogy of proper proportionality and analogy of attribution (*unius ad alterum*) in proving the existence of God according to the *quarta via*. For we are concerned with effects reflecting the nature of the first Exemplary Cause and depending *per se* upon the first proper Efficient Course. We are following here the teaching of St. Thomas that " good " is said of God and creatures according to both analogy of attribution and proportionality. *Proportionaliter*, as form or perfection common to all beings through a similitude to the *Summum Bonum*, and attributively, according to first Goodness effecting goodness in creatures.[24]

The Absolute Principle of Perfection and Limited Participating Perfection

We are not prepared to present all of the evidence for the proper demonstration until we have analyzed participating transcendental perfection. While the theory of analogous reasoning has more reference to the orders of understanding and predication of transcendental reality, participation has more reference to the order of the existence of such reality, the order of being.

It is a common teaching and a familiar theme in the writings of St. Thomas that finite, derived existence is an act or perfection received from first act and consequently enjoying a certain participation in the being or *esse* of that which is Being.[25] Thus, we do not say that creatures are being but that they *have* being in a limited way or mode. Whatever has its being in such a way must have it non-essentially and must

[24] *Summa Theol.*, q. 13, a. 6.

[25] *Ibid.*, q. 44, a. 1; q. 71, a. 3; q. 75, a. 5, ad 1; I-II, q. 94, a. 2; *III Sent.*, d. 27, q. 2, a. 4; *de Pot.*, q. 3, a. 5;*IV Metaphys.*, lect. 1; *VII Metaphys.*, lect. 3; *I Cont. Gent.*, c. 3; *II Cont. Gent.*, cc. 13, 15.

be traced back to an essentially existing Being, i. e., one whose essence is *to be*. The *quarta via* involves more than the bare outline of a proof invoking efficient causality, though that in itself is sufficient to prove the existence of a first Cause. It also involves more than the fact that composite being is the subject of causal action. For prior to this fact, and basic to it, is the consideration of the foundation for the very relationship of such principles as act and potency, perfection and limit, and existence and potential essence. In the *Treatise on Creation*, St. Thomas has asserted that from the fact that a thing has being by participation it follows that it is caused by another.[26] It can be seen that the characteristic of having been caused is related to existence by participation as an essential property is related to the essence of a thing. Now, wherever an essential concomitant property is found, the essential nature itself must be found. Non-participating, uncaused, simple Being is discovered to be the only foundation for and source of participating, caused, composite being.

In this second part we are emphasizing the consideration of existential being and its transcendental attributes according to that which exists *per essentiam* and that which exists *ab alio* or *per participationem*. Hence we must endeavor to understand as far as possible what manner of participation we have reference to when considering infinite or essential Perfection and finite or participated perfection. Abbé Penido describes three distinct types of participation:

> (1) to have part in the nature of another as the son shares in the father's nature; (2) to have part in a nature that is different, though the part shared exists univocally in the other as the heat of fire and that induced into iron; and (3) to have part by way of imitation or similitude in the nature found by essence in another like the imprint of a seal or a photographic image. In the last there is a resemblance but not communication of nature. Here in a true sense is analogous participation.[27]

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[26] *Summa Theol.*, I, q. 44, a. 1, ad 1.

[27] Penido, "Le rôle de l'analogie en théologie dogmatique," *Bibliothèque Thomiste*, XV (Paris, 1931), 360.

We see then that participation in regard to an absolute perfection which exists *per essentiam*, and perfections which exist *per participationem* must be taken in the third sense. It must signify not having any actual part in, but imitating that which is imitable in some, though an inadequate way.[28] Yet in the philosophy of St. Thomas, being which exists by participation is not merely a resemblance or a copy of being which exists by essence, though it is truly that with regard to form. In this St. Thomas' existential theory of participation severs itself from the Platonic theory of pure forms or separated ideas. For though St. Thomas seems to have borrowed the germ of the theory of participation from Platonic philosophy, he gave it a firm foundation in existential metaphysics by establishing the relationship of causality between the Absolute Being and all other beings whatsoever. All of the minor analogates contained confusedly in the concept of being but predicated of explicitely as individuals enjoy the privilege of existing in essentially diverse modes of derived or participated being. It is thus (as we have explained above) that the vague *ratio* of being can be understood as a distinct, specific being. For St. Thomas, then, the participating being is at the same time a similitude or imitation of the being *per essentiam* and also the subject of the causal action of a Being who is uncaused and non-participating.

> For whatever is found in anything by participation, must be caused in it by that to which it belongs essentially, as iron becomes ignited by fire . . . ; therefore all things apart from God are not their own being, but are beings by participation. Therefore it must be that all things which are diversified by diverse participation of being so as to be more or less perfect are caused by one First Being who possesses being most perfectly.[29]

Here we recognize something like the second type of participation described by Penido. However, as we have seen before, St. Thomas does not hold that the being or *esse* which is in

[28] *Summa Theol.*, I, q. 4, a. 3, ad 1, et ad 3; *II Sent.*, d. 17, q. 1, a. 1, ad 6.

[29] *Summa Theol.*, I, q. 44, a. 1; *De Substantiis Separatis*, c. 3 (Vivès ed., XXVII, 278 a).

the hierarchy of participating things is in them univocally, but proportionally. And the perfection which is in the analogates can be understood strictly, only with reference to their principle. In the *Compendium Theologiae* we read, " Things which are by participation are reduced to that which *is* by essence as their principle and cause." [30]

Ultimately and radically we see that a finite being is a composition by reason of the fact that its existence is participated, and that only Being non-composite and absolutely simple contains the sufficient reason for both participated being and the cause of the sharing. The principle which is invoked here is unquestionably that of causality, that is, whatever exists, ultimately does so by virtue of a being that does not *receive* its being, i. e., an uncaused being. The argument from causality is used to make explicit that which is assumed or implied more vaguely and commonly in the doctrine of participation, which seems to underlie our considerations of sufficient reason. Before we know that such perfections as being, goodness, and unity in a plant are unexplainable apart from an all-perfect Cause, we know that they are limited. And we know that this plant has less of these perfections than a man has. It is obvious that there is discernible in creatures something prior, both psychologically and ontologically, to the actuality and the knowledge of the metaphysical composition of potency and act which demands an adequate efficient cause. The fact of metaphysical composition is recognized through a process of philosophic speculation. But there is something which is recognized more immediately and which is the very *raison d'être* of the metaphysical composition in things. It is the reality of derived being, discovered by man in the mysterious, essentially varied, and limited character of the universally possessed transcendental perfections, primarily the perfection of being (*esse*) found in all things. This does not mean that any other acts, i. e., actualized perfections in the universe, cannot be known as effects which ultimately require an efficient

[30] *Compendium Theologiae*, I, c. 123.

cause who is supremely actualized or infinite Act. The other four proofs of St. Thomas are surely evident, valid, and necessary in the particular spheres of reality to which they apply. But the *quarta via* applies to a more extensive sphere of reality, that is, any being and all being as such. It dominates the entire sphere of finite existential reality. It is the limited, graded, imperfect, non-*per essentiam* existence which is the immediate indicator of produced or caused being. Hence we find St. Thomas affirming: "A being of this nature cannot but be caused, just as man cannot but be capable of laughter." [31] While this sentence is significant in showing the naturally inseparable property relationship between participated and caused being, it is in the whole passage that we find a profound fact upon which is based the primacy and ultimate character of participation.

> Although the relation to a cause is not part of the definition of a thing caused, still it follows as a consequence on what belongs to its essence, because from the fact that a thing has being by participation it follows that it is caused. Hence such a being cannot be without being caused, just as a man cannot be without having the faculty of laughing. But since to be caused does not enter into the essence of being as such, therefore it is possible for us to find a being uncaused.[32]

Here we see that since " being caused " is not of the *ratio* of being *or esse* (taken *simpliciter*) it is possible to discover uncaused Being. We are now in a position to see the ultimate character of participation. For it can be seen that while " to be caused " is a necessary property of participated being, " to be," that is, existence, is of the very nature of being *simpliciter*. We define being as that the act of which is to exist. And more generally, existence is defined as the act which places a thing outside of nothing and outside of its causes. Now the mind proceeding according to the two general movements possible to it in acquiring knowledge, makes the primary division of existential beings into those which do not have

[31] *Summa Theol.*, I, q. 44, a. 1, ad 1.
[32] *Ibid.*

their act of existence in a perfect and unlimited way and that which *is* unlimited existence. Another way of expressing this formula is according to being which has the perfection of existence *per essentiam* and beings which have it *per participationem*.

St. Thomas has shown in several places that it is impossible for some one thing to belong to two essentially diverse beings and to both according to its essence.[33] Hence, the perfection of existence can be had essentially by only one. In the others it is had by a partial and non-exhaustive possession. This may be illustrated by propositions which predicate a note totally or only partially of a subject. When an attribute is predicated totally and essentially of a subject it does not exceed or fall short of the subject, but is identical and convertible with it, as in "Man is a rational animal." But when an attribute is predicated of a subject only partially, e. g., where the individual participates in the species, as in "John is a rational animal," the predicate exceeds the individual subject and is not convertible with it. In the *De Ente et Essentia*[34] St. Thomas

[33] *II Cont. Gent.*, c. 15. Impossible est autem aliquod unum duobus convenire et utrique secundum quod ipsum. Quod enim de aliquo secundum quod ipsum dicitur, ipsum non excedit: sicut habere tres angulos duobus rectis aequales non excedit triangulum. Si igitur aliquid duobus conveniat non convenit utrique secundum quod ipsum est. Impossible est igitur aliquod unum de duobus praedicare ita quod de neutro per causam dicatur sed oportet vel unum esse alterius causam, sicut ignis est causa caloris corpori mixto cum tamen utrumque calidam dicatur; vel oportet quod aliquod tertium sit causa utrique, sicut duabus candelis ignis est causa lucendi. Esse autem dicitur de omni eo quod est. Impossible est igitur esse aliqua duo quorum neutrum habeat causam essendi, sed oportet utrumque acceptorum esse per causam, vel alterum alteri esse causam essendi. Oportet igitur quod ab illo cui nihil est causa essendi, sit omne illud quod quocumque mode est. Deum autem supra ostendimus (I, c. 13) hujusmodi ens esse cui nihil sit causa essendi.

[34] *De Ente et Essentia*, c. 4. Falsum est dicere, quod natura hominis inquantum hujusmodi habeat esse in hoc singulari: si enim esse in hoc singulari conveniret homini, in quantum est homo, non esset nunquam extra hoc singulare; similiter, si conveniret homini, inquantum est homo non esse in singulari, nunquam esset in eo. Sed verum est dicere quod homo inquantum est homo, non habet quod sit in hoc singulari vel in illo. Patet ergo quod natura hominis absolute considerata abstrahit a qualibet esse.

explains why the perfection of being a rational animal is not confined to or convertible with the individual subject. While it is true to say that John or Paul is essentially a man, it is not true to say that the perfection of " being man " is essentially John or Paul. For if to be in this individual belonged to man, insofar as " being man " is concerned, human nature would never exist outside of this individual. On the other hand, if it belonged to the nature of man not to exist in the individual, then rationality could not exist in John or Paul. But rational animal is predicated essentially of and convertible with man, *natura secundum se,* abstracted from all existence in individual matter which limits essential form which in itself is relatively inexhaustible or unlimited as to number.

Similarily on the metaphysical level the absolute transcendental perfections of being, goodness, wisdom, love, and the like are participated by many natures unequally and nonunivocally according to the different orders to which these natures belong. Received or contained and limited by the participating natures, as the essence of man is in the case of the individual, the transcendental perfections are received and limited by the essence or form in potency to receive and contain them. And just as the perfection of human nature does not of its essence denote " being in " or " not being in " this individual, so on the higher metaphysical level, abstracted from the singular, sensible, existing things the transcendental perfections do not denote either being participated and limited or imparticipated and unlimited. Otherwise these perfections could not be found in both ways, for example, the wisdom found in man and the wisdom of God. But the complete actualization of such perfection demands by its very nature a subject in which the perfection may exist in an unlimited mode of being —infinite existence. Such perfections are not found in their completeness in any existing created nature as we find the perfection of human nature in a circumscribed specific nature whose measure is a determined essence.

It is surely clear in the philosophy of St. Thomas that a Being whose essence it is to exist, and exist *a se,* cannot be

diversified or multiplied.[35] Neither can any of its nature be imparted in a univocal way. In the question treating of God's perfection, " Whether any creature can be like God? "[36] the Angelic Doctor answers four objections presented against any likeness of creatures to God. First, he says that things are at the same time like and unlike to God; like insofar as they imitate what is capable of being imitated in God, and unlike according as they (as effects) fall short of the power of their cause. Secondly, God's relation to creatures is not merely that of a being in a higher genus, but of a being that transcends all genera and constitutes their ultimate principle. This is why we say that generic and specific perfections of creatures are only virtually and not formally in God. As principle of their genera He has the power to cause such perfections. Thirdly, there is no possibility of the likeness of creatures to God being univocal, since there is no " agreement in form according to the formality of the same genus or species," but the likeness is according to analogy. For being is predicated of God as essential being and of creatures only as participating in being. Lastly, St. Thomas asserts that though creatures may said to be like God, the converse is not true. Such a Cause and its effects are in entirely different orders and there cannot be a mutual likeness between them. The example is given of a statue which is like the man it represents while the man is not like the statue which represents him. In the *Quodlibetales* also is to be found one of St. Thomas' best descriptions of participated perfections.[37]

[35] *I Cont. Gent.*, c. 42.

[36] *Summa Theol.*, I, q. 4, a. 3, ad 1-4.

[37] *Quodl.* II, q. 2, a. 3. Respondeo dicendum quod dupliciter aliquid de aliquo praedicatur: uno modo essentialiter, alio modo per participationem; lux enim praedicatur de corpore illuminato participative, sed si esset aliqua lux separata, praedicaretur de ea essentialiter. Secundum ergo hoc dicendum est, quod ens praedicatur de solo Deo essentialiter eo quod esse divinum est esse subsistens et absolutum; de qualibet autem creatura praedicatur per participationem: nulla enim creatura est suum esse, sed est habens esse. Sic et Deus dicitur bonus essentialiter, quia est ipsa bonitas; creatura autem dicuntur bonae per participationem quia habent bonitatem: unumquodque enim inquantum est, bonum est secundum illud Augustini in *De Doctrina Christiana*, I, quod inquantum sumus boni, sumus. Quandocumque

The First Efficient Cause of Essentially Varied Perfections

In the first two parts we have endeavored to answer two questions which Aristotle holds must precede the knowledge of a thing's existence.[38] According to his analysis of the knowledge of anything, we must be able to answer four questions concerning it. Whether the connection of an attribute with the thing is a fact, and what is the reason for the connection? Are two questions which must be answered before an unknown existent and its nature can be admitted. Concerning the connection of the attribute, we have connected the essentially varied, limited, transcendental being and perfections dependently with the source or principle of such perfections. And secondly, we gave as the reason for such a connection participating perfection and *per essentiam* Perfection, on the basis that total and absolute perfection is the only explanation for derived being and its transcendent perfections. This reasoning is based on the fact that the simple transcendental perfections existing according to more and less require an absolute Maximum, and the diversity of being (*esse*) ultimately requires simple subsistent Being as their principle.

Yet we do not claim to have completely answered the third question of Aristotle, the fact of the existence (of God) until we have completed the whole Thomistic argument which makes use of the *a posteriori* demonstration common to all five of St. Thomas' proofs. In the *quarta via* it is the first proper efficient Cause of being and its transcendental perfections that is demonstrated. Thus as we have said above, the supereminent Principle or Maximum is verified in explicit demonstration where heretofore the reasoning proceeded more commonly and inductively. Nevertheless, this latter process implicitly contains the former and is satisfying and even conclusive to some types

autem aliquid praedicatur de altero per participationem, oportet ibi aliquid esse praeter id quod participatur: et ideo in qualibet creatura est aliud ipsa creatura quae habet esse et ipsum esse.

[38] *II Poster. Analyt.*, 89b, 22.

of thinkers. We might even say that anyone accustomed to the contemplation of divine mysteries and the penetration of the mystery of being may very well be convinced of the necessity of God as source of all of the " partial " mysteries—the vestiges and traces of the Creator in the universe. Such a one may not bother to pursue the syllogistic deductive demonstration.

In the proper demonstration of the existence of God we make use of the *a posteriori* method. Here we must employ as a middle term what may be called a nominal, or rather, a significative definition in contrast to the essential definition used in *a priori* demonstrations. We use the term " significative " in preference to the term " nominal " because of the connotation which the latter has in the history of philosophy. According to this latter theory there is no universality, either of concept or of objective reality, and the common name is merely a sign selected to designate a plurality of objects. Signification refers to that from which the giving of the name comes (*id a quo imponitur nomen*),[39] that is, the form or nature which it represents to the mind,—the *qualitas nominis*. Thus, the significative definition is here meaningful to anyone who understands even on the level of the lower analogates the nature of such effects as being, goodness, truth, wisdom, etc. And the signification takes on more meaning as the intellect penetrates higher analogates.

In the *De Potentia*[40] we find a systematic series of arguments for the existence of a first efficient Cause: (1) for the being which is common to all things distinct from each other, (2) for perfections found in degrees of more and less in several things, and (3) for the composition in things which do not exist of themselves but by way of participation. In this question St. Thomas seems to have brought together into one summary his reasoning on the existence of the *Maxime Ens* required as efficient cause of the being and all transcendental perfections

[39] Maritain, *Introduction to Logic*, p. 62.
[40] *De Pot.*, q. 3, a. 5.

in existing things. Moreover, he states from what philosopher and work he has drawn his ideas.

In the first argument he asserts that where we find something common to a number of things we must conclude that it is the effect of one cause. For since each one is different from the other, and diversity of cause produces diversity of effect, it is impossible for the common note to belong to each one by reason of itself. In other words, that which properly constitutes finite, contigent, beings as individuals can never explain the presence of a common transcendental attribute. The individualizing traits in each are different, but the being, goodness, unity, etc., are similar. The diverse do not of themselves possess these common qualities. So St. Thomas concludes that, since being is found in all things which are distinct from one another, they must of necessity come into being not of themselves but by the action of some common cause. This argument he ascribes to Plato who claimed that every multitude must be preceded by unity. In the *Phaedo* Plato holds that the beauty found in any corporeal being is " sister to the beauty found in all others." [41] Neither Phaedo nor Phaedrus can be the source of the beauty in them, but it must come from a higher principle where the note is had in its full perfection and is undivided.

The passage, " it follows of necessity that they must come into being not of themselves but by the action of some cause," requires that we consider St. Thomas' teaching on the efficient cause of the coming to be of all finite creatures. In the *Commentary on De Generatione Et Corruptione* he asserts:

> In one sense things come to be from that which has no being without qualification. Yet in another sense they come to be always from what is. For coming to be necessessarily implies the pre-existence of something which potentially is but accidentally is not, and this something is spoken of both as being and as not being.[42]

Obviously, the first coming to be spoken of refers to God's creative act through which the creature is made from non-being

[41] *Phaedo*, 101 a.
[42] *I De Generat.*, lect. 3.

simpliciter, and therefore made being *per se.* For only that which is Existence by essence can properly cause being in act, existence, as its effect. Effects must be referred to proportionate causes. Thus St. Thomas says:

> it is not possible that a second cause by its own power be the principle of being as such; this belongs to the first Cause since the order of effects follows the order of causes. Now the first of all effects is being, which is presupposed to all other effects, and does not presuppose any other effect: wherefore to give being as such must be the effect of the first Cause alone by its own power and whatever other cause gives being does this insofar as it is the recipient of the divine power and operation and not by its power. . . . And since the power of every creature is finite, no creature can possibly act even as instrument to the effect of creating something: since creation demands infinite energy in the power whence it proceeds.[43]

The second coming to be spoken of in the passage from the *De Generatione,* "from what is" or pre-exists in some way, has reference to generation. This is substantial becoming which is within the power of natural agents, wherein is realized something from relative non-being that is, from potentiality. But there is no question here of realizing or actualizing something from absolute non-being. In the generation of an oak tree, for example, a tree essentially or *per se* is made through the intrinsic principles of matter and form uniting to make a composite essence, and secondly, though the actualization of this essence. For this is a subject with capacity to receive further perfection which occurs when it receives the primary act, existence. In the order of specific beings, i. e., in the hierarchy of natures, a new being but not being *per se* is made, since we have not something made from absolute non-being. For there was previously some *being* to become or change, and thus this new being *as being* is made *per accidens.* Being *in potentia* and being *in actu* are not contradictories, but only contraries, that is, contrary states of being. They exist in the same genus and there is here only a change or transmutation

[43] *De Pot.,* q. 3, a. 4.

from one state of being to another. Hence in generation the new thing is a tree substantially or essentially caused and it is *being* accidentally caused. As a tree it was made from non-tree—an acorn, and thus made *per se* and substantially. As a being it had its coming to be from being in potency, by way of change or alteration through contraries (not contradictories) and thus made *to be, per accidens.*

In the second argument from the *De Potentia* is considered the need of an absolutely perfect Being as the supreme measure and source where several things possess the same note. " For if each one were of itself competent to have it there would be no reason why one should have it more than another. . . . Now there is one being most perfect and most true." [44] Consequently he concludes that all less perfect beings derive perfection therefrom. St. Thomas tells us that he has taken this from the argument of Aristotle in the *Metaphysics.*[45] Lastly, St. Thomas proves, according to the principle, " Whatever exists through another must be reduced to that which exists of itself," that this last must be a Being in whom there is no composition whatsoever. He concludes that from such a Being must proceed all the composite things which have being by participation. And this is from Avicenna (*Metaphysics* VIII, 6; IX, 8) . The same proof is stated very directly in the *Contra Gentiles* [46] where it is shown that several different things would not unite without a cause of the composition. And if the first

[44] *Ibid.*

[45] *II Metaphys.*, 993b.

[46] *I Cont. Gent.*, c. 18. Si igitur compositus esset Deus, haberet componentem non enim ipse seipsum componere posset, quia nihil est causa sui ipsius; esset enim prius seipso, quod est impossible. Componens autem est causa efficiens compositi. Ergo Deus haberet causam efficientem. Et sic non esset causa prima quod supra (c. 13) habitum est. . . . Praeterea, in omni composito bonum non est hujus vel illius partis, sed totius, et dico bonum secundum illam bonitatem quae est propria totius et perfectio eius: nam partes sunt imperfectae respectu totius; sicut partes hominis non sunt homo, partes etiam numeri senarii non habent perfectionem senarii, et similiter partes lineae non perveniunt ad perfectionem mensurae quae in tota linea invenitur. Si ergo Deus est compositus, perfectio et bonitas eius propria invenitur in toto, non autem in aliqua eius partium. Et sic non erit in eo pure illud bonum quod est proprium ei. Non est ergo ipse primum et summum bonum.

Cause were not simple it would require an efficient cause of its own composition. Hence, there must be an ultimate "compounder" devoid of all composition and absolutely simple and perfect, Who is the adequate efficient Cause of the union of the two diverse principles in creatures, i. e., perfection and the imperfect and limited receiver of the perfection.

The discussion of the divine imparting of being and other *simpliciter* transcendental perfections is not complete without a consideration of God's exemplary causality. In the *De Veritate* St. Thomas asserts that God effects natural existence in things through creation without the mediation of an agent cause but with the mediation of a formal cause, since natural form is the principle of natural being.[47] It is evident that natural forms considered in themselves cannot be principles of existence without presupposing some previous principle. Unless we wish to give these forms a separate and independent existence as Platonic philosophy does, we must posit a principle from which they proceed. To an objection which attempts to set aside the divine preservation of things by pointing out that since form without assistance from outside can be a principle of operation and knowledge, it should likewise be a principle of existence after divine action has ceased, St. Thomas answers that the form of a thing is not the principle of knowledge, operation, or existence apart from a previous principle, viz., God.[48]

The extrinsic formal cause is called the *forma ad quam* in distinction to the intrinsic formal cause, the *forma secundum quam* which internally constitutes the finite being in a determined grade of being. This latter is the principle which as correlative and complement of the material cause is compared to it as act to potency, and together they constitute the essence

[47] *De Verit.*, q. 27, a. 1, ad 3. Dicendum quod esse naturale per creationem Deus facit in nobis nulla causa agente mediante, sed tamen mediante aliqua causa formali: forma enim naturalis principium est esse naturalis, et similiter esse spirituale gratuitum Deus facit in nobis nullo agente mediante sed tamen mediante aliqua forma creata quae est gratia.

[48] *De Pot.*, q. 5, a. 1, ad 18.

of a corporeal being. This formal cause has both an *actus primus* and an *actus secundus*. Its first act is the information of matter, e. g., to vivify the body is the first act of the soul. Its second act, operation is an act of the form *as* united to the body and strictly attributed to the suppositum.[49]

But the *forma ad quam* extrinsically determines the likeness or image of the effect that is to be produced. It supplies the artist with the pattern or idea of the effect which he as agent intends to produce. It is the archetype to which the effect in its own mode of being actually conforms more or less perfectly —that is, as nearly as the existential is able to conform with the intentional form. The architect's plan as conceived by his mind is not exactly the same as the form of each completed building. The plan in the mind is much less limited and more perfect in its own way than any effect, though the actualized alone can be said to have real goodness and the other perfections belonging to its order. But in the mind of the architect the plan is not limited to any one time or place, nor composed of any particular material and it is easily modified. Now in the divine order, how infinitely and incomprehensively more perfect must be the archetype than the actualized being in the finite order. Hence St. Thomas insists that the similitude may never be thought of in a univocal way.[50]

God sees in His essence the infinitude multitude of possible things as so many ways in which He is imitable analogically. The divine essence containing simply all of the divine attributes is the formal and primary object of the divine intellect. This is known as God's simple intelligence. At the same time the knowledge of the divine Being embraces everything actual or possible in creation—what exists, has existed, or is yet to exist. This is called God's knowledge of vision. Any distinction, of course, is based upon our imperfect mode of knowing and is

[49] *De Verit.*, q. 27, a. 3, ad 25. Duplex est actus formae: unus qui est operatio, ut calefacere, qui est actus secundus, et talis actus formae supposito attribuitur; alius vero actus formae est materiae informatio quae est actus primus; sicut vivificare corpus est actus animae; et talis actus supposito formae non attribuitur.

[50] *De Pot.*, q. 3, a. 4, ad 9.

not to be found in God.[51] St. Thomas points out that the knowledge of God, contrary to our knowledge, which is determined and caused by things outside of the mind, is Itself the Cause of things. Our knowledge is an accident in the genus of quality; God's knowledge is subsistent perfection, i. e., of His very Essence.[52] He does not know things because they are, but things are because He knows and wills them to be. Analogous to the artificer with practical knowledge by which he produces a work of art, the divine knowledge insofar as the divine will is joined to it, is the Cause of the existence of creatures.

The knowledge of God is the Cause of things. For the knowledge of God is to all things what the knowledge of the artificer is to things made by his art. Now the knowledge of the artificer is the cause of the things made by his art from the fact that the artificer works by his intellect. Hence the form of the intellect must be the principle of action as heat is the principle of heating. . . . The intelligible form does not denote a principle of action insofar as it resides in the one who understands unless there is added to it the inclination to an effect, which inclination is through the will. For since the intelligible form has a relation to opposite things (inasmuch as the same knowledge relates to opposites), it would not produce a determined effect unless it were determined to one thing by the appetite, as the Philosopher says (*Met.* IX). Now it is manifest that God causes things by His intellect, since His being is His act of understanding; and hence His knowledge must be the cause of things, insofar as His will is joined to it.[53]

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[51] *Summa Theol.*, I, q. 14, a. 4. Unde cum ipsa sua essentia sit etiam specie intelligibilis, ut dictum est (q. 3, a. 7), ex necessitate sequitur quod ipsum intelligere sit ejus essentia et ejus esse. Et sic patent ex omnibus praemissis quod in Deo intellectus, intelligens, et id quod intelligitur, et species intelligibilis et ipsum intelligere, sunt omnino unum et idem.

[52] *Ibid.*, q. 15, a. 2. Non est autem contra simplicitatem divini intellectus quod multa intelligat; sed contra simplicitatem ejus esset, si per plures species ejus intellectus formaretur. Unde plures ideae sunt in mente divina ut intellectae ab ipsa. Quod hoc modo potest videri. Ipse enim essentiam, suam perfecte cognoscit. Unde cognoscit eam secundum omnem modum quo cognoscibilis est. Potest autem cognosci non solum secundum quod in se est sed secundum quod est participabilis secundum aliquem modum similitudinis a creaturis. Unaquaeque autem creatura habet propriam speciem, secundum quod aliquo modo participat divinae essentiae similitudinem.

[53] *Ibid.*, q. 14, a. 4.

The form of the effect in the divine Mind and the form intrinsic to the constitution of the creature are said by St. Thomas to be homogeneous forms but not univocal since they have different modes of being, one in the Mind and the other in the thing.[54] This is that similitude between creatures and Creator which the Angelic Doctor so many times compares to the work of art and the idea in the mind of the artist. But there is another likeness between God and creatures which St. Thomas describes as both non-univocal and non-homogeneous:

> There is another likeness inasmuch as the divine essence itself is the supereminent but not homogeneous likeness of all things. It is by reason of this latter likeness that good and the like are predicated in common of God and creatures: but not by reason of the former, because when we say ' God is good ' we do not mean to define *Him* from the fact that He understands the creature's goodness, since it has already been observed that not even the house in the mind of the builder is called a house in the same sense as the house in being.[55]

This doctrine of the two likenesses (analogical) between creatures and God is found again in the question on creation in the *De Potentia* where we read:

> This is true in one way inasmuch as creatures reproduce in their own way the idea of the divine Mind as the work of a craftsman is a reproduction of the form in his mind. In another way it is true in that creatures are somewhat likened to the very nature of God, for as much as they derive their being from the first Being, their goodness from the sovereign Good and so on.[56]

Such are the absolute perfections which St. Thomas maintains are predicated both causally and essentially of God, in the following quotation:

> These names are applied to God not as the Cause only, but also essentially. For the words ' God is good or wise ' signify not only that He is the Cause of wisdom or goodness but that these exist in

[54] *De Pot.*, q. 7, a. 7, ad 6.
[55] *Ibid.*
[56] *Ibid.*, q. 3, a. 4, ad 9.

Him in a more excellent way. Hence as regards what the name signifies, these names are applied primarily to God rather than to creatures, because these perfections flow from God to creatures, but as regards the imposition of names, they are primarily applied by us to creatures which we know first.[57]

Thus it is evident that these are types of exemplarism, depending on whether the creature is a reproduction of the divine idea as the forms in natural agents are, or is in some way likened to the divine Nature itself, as finite goodness, love, wisdom and the like are. In a passage in the *Commentary on the Book of Sentences* St. Thomas makes this distinction most clearly. He points first to the proper acceptation of divine examplarism, the idea in the divine Mind. For in the philosophy of St. Thomas, properly and formally speaking the *causa exemplaris* is the idea had by the agent and as such is found only in an intelligent agent. But he also points out that the divine Nature may also be called an exemplar *sicut ratione* when there exists formally both in God and in creatures the same *ratio proportionaliter*. Thus is first Goodness the exemplary cause of everything that has goodness, and this is true for the other absolute perfections of being. St. Thomas emphasizes the fact that God is not the exemplar of color and of truth in the same way.[58]

In the *I Contra Gentiles*, c. 93, St. Thomas teaches that those moral virtues which derive their species from action only—and action which is not inconsistent with divine perfection, indeed, cannot even be excluded from it,—are said to be in God. Ferrariensis commenting on this asserts that such divine virtues constitute the exemplars for human virtues.[59]

[57] *Summa Theol.*, I, q. 13, a. 6.

[58] *I Sent.*, d. 19, q. 5, a. 2, ad 4.

[59] Circa corollarium attendendum secundum doctrinam Sancti Thomae, *I Sent.*, d. 19, q. 5, a. 2, ad 4: Quod res dupliciter in Deo esse possunt exemplariter: scilicet, in natura ipsius, et in intellectu. In natura divina dicuntur illa exemplariter esse quae formaliter sunt et in Deo et in creatura. Cum enim sit utriusque una ratio proportionaliter, secundum quod aliqua perfectio est in creatura, exemplatur a perfectione existente in natura divina sicut imperfectum a perfecto: sicut, quia sapientia formaliter est in Deo et in homine, sapientia humana est quaedam

He compares the limited and particularized to the Absolute as a candle light to the sun. But he is careful to stress the Thomistic teaching that those virtues not properly applicable to God find their exemplar not in the divine nature formally but only in the divine wisdom, as is the case with all corporeal things. The commentator on the *Contra Gentiles* emphasizes especially these points, viz., any and all perfections of created

imitatio sapientiae divinae. In intellectu autem dicuntur exemplariter esse ea quorum propriae rationes cognoscuntur. Et quia omnium etiam quae formaliter in Deo non sunt proprias rationes Deus cognoscit, ideo omnia exemplariter sunt intellectu divino, sive in divina sapientia, ut hic dicitur. . . . Considerandum secundo, (in natura) quod illa proprie dicuntur habere inter se similitudinem secundum convenientiam in natura quae in aliquo formaliter conveniunt quod, scilicet, secundum suam formalem rationem in utroque inventur. Si autem quod in uno formaliter est, in altero formaliter non sit, sed tantum virtualiter et eminenter, illa non dicuntur similia secundum convenientiam in natura. Sed quamvis quod sic alterum virtualiter et eminenter continet, non habeat convenientiam in natura cum ipso, potest tamen concipi ut alteri proportionatum et ut eius propria ratio; sicut virtus solis, licet non habeat cum calore similitudinem in natura, potest tamen concipi ut ratio caloris eo quod calorem virtualiter et eminenter contineat; et sic virtus solis concepta ut proportionata calori erit exemplar eius proprium in intellectu, quae tamen secundum se non est exemplar formaliter secundum esse naturae, nisi improprie velimus accipere nomen "exemplaris" pro omni similitudine quomodocumque accepta sive, inquam, sit adequata sive excedens.

Ad propositum ergo negatur nihil posse esse exemplariter in divina sapientia quod non sit exemplariter in divina natura; accipiendo esse exemplariter in natura pro eo quod est habere in ipsa similitudinem secundum convenientiam formalem in natura. Stant enim simul quod aliquid in intellectu divino sive in esse cognito, habeat proprium exemplar, eo quod eius propria ratio concipitur ab intellectu divino; et tamen in divina natura formaliter esse non habeat, sed tantum virtualiter, et sic in ipso natura exemplar non habeat. . . . Voco autem formalem similitudinem eam quae est eiusdem rationis aut simpliciter aut proportionaliter. Unde cum divina essentia concipitur ut propria ratio alicujus in ipso non existentis formaliter sed eminenter tantum, ipsa res est in Deo exemplariter secundum repraesentationem intelligibilem tantum. Dum autem concipitur ut ratio eius quod in ipsa formaliter est, res repraesentata habet in Deo similitudinem ac exemplar et secundum repraesentationem intelligibilem et secundum convenientiam formalem in natura. Sapientia enim humana et repraesentatur secundum propriam rationem per formam intellectam sive conceptam ab intellectu divino; et convenientiam formalem habet cum natura divina inquantum sapientia est, eo quod sapientia et in Deo et in homine sit secundum unam rationem analogam, ut superius est ostensum (c. 34, com. n. 16) Et similiter dicitur de virtutibus quae proprie Deo conveniunt. *Commentaria Ferrariensis* in *Summam Contra Gentiles*, c. 93 (*Opera Omnia*, ed. Leon., XIII, 257).

things have their exemplars in the divine idea of them. All absolute perfections as being, goodness, wisdom, and the like are said to be *exemplariter* in the divine nature, since they exist there eminently and formally. They are likewise known to the divine intellect which is identical with the divine nature. All mixed perfections such as humanity and corporeality are said to exist only virtually and eminently in the divine Nature.

It does not seem that we should ever completely deny that we have reached a knowledge of God's existence until we have actually demonstrated it through the *a posteriori* proof. On the other hand, this demonstration is necessary and satisfying to one who wishes all of the steps of logical inference made explicit. Thus to complete the verification process a syllogism including the following premises should be constructed.

Only Being *per essentiam* (Subsistent Perfection) can properly efficiently cause the being found in the hierarchy of things in the universe.

But Being *per essentiam* (Subsistent Perfection) is what we mean by God.

∴ God is the only proper efficient Cause of the being found in the hierarchy of things in the universe.

The major premise is made evident in St. Thomas' explanation of the *per se* and *per accidens* coming to be of the being (*esse*) in all creatures of the universe. The minor is the result of the reasoning to the maximum being and perfection as ultimate measure in the comparison of more and less of the same transcendental perfection in several essentially different beings. This includes the extended process of the analysis of participated perfection and its absolute Source. For those who desire the syllogistic process which produces the conclusion " God exists," we must construct two syllogisms. One of these results in the more common conclusion of the existence of a Perfection by essence as the principle or source of limited and participated perfection; the second is the further proper deduction from this one.

Participated and limited being and the transcendental perfections cannot exist apart from Perfection *per essentiam.*

But these perfections (etc.) are found to exist in finite creatures.

∴ Perfection *per essentiam* exists of necessity.

Perfection*per essentiam exists.*

But only God is Perfection *per essentiam.*

∴ God Exists.

Conclusion

In conclusion let us recall that we began by warning the reader that the penetration of the mystery of being and the hierarchically ordered transcendental perfections is not an easy task. We have seen that by mental operations which belong to the inductive method, viz., observation and comparison, we dialectically arrive at and posit a supereminent Principle. This is the maximum which man's intellect logically and psychologically demands when analogously comparing the degrees of more and less of such perfections. Yet we predicate, we might say, provisionally throughout our analysis of the imitative participation of creatural perfections in perfection *per essentiam.* The strict verification of the existence of such a Perfection is through the demonstration of it as a first proper efficient (and exemplary) Cause. Employing both the analogy of proportionality and of attribution we name things and God from the same perfection, since these perfections of being have the same privilege which being itself has of existing in different modes, even in an infinite mode. As to whether this process is ontologically valid, i. e., verifiable in reality, we do not strictly and conclusively pronounce upon until we have demonstrated the absolute need of an existing Subsistent Perfection as the proper efficient Cause of limited finite being and its transcendental properties. Existing reality forms the basis of all true predication in our judgments. Hence those predications by which we attach the attributes good, true, noble and the like as names to God constitute enunciative propositions which will remain so until we are in a position to assert judicatively their

truth. In predicating an attribute of any subject we join two concepts in an enunciative proposition, seeking some identity or difference. Unless the comparison conforms with things as they are, it is not an expression of objective truth and therefore does not represent reality. The mind does not give its assent, by the judicative act, (which is the formal act of judging) to these propositions until evidence compels it to do so. When we have finally proved the existence of God through an *a posteriori* demonstration requiring Him as First Cause of those perfections predicated analogously of both God and creatures, the predications are verified and validated in the order of reality. The *quarta via* does not seem to be strictly completed until we have shown that the transcendental perfection of being and its properties found in essentially varied degrees in creatures, are unexplainable apart from an absolute Maximum, Subsistent Perfection as their proper (*per se*) efficient Cause. The consideration of the exemplary Cause, while not necessary to the primary proof, is helpful in understanding better the whole theory of participated perfection.

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THE FORMAL SUBJECT OF METAPHYSICS

THE THOMIST revival that began at the turn of the present century had to face the difficult and insistent epistemological challenge laid down by Kantianism. Philosophy had to establish its right to existence. Its chief concern was to defend its most intimate metaphysical concepts against the destructive onslaughts of subjectivism. So quite willingly the Thomists of the time plunged immediately into metaphysical problems at the beginning of the philosophical course. It seemed to them necessary to do so, because of the intellectual atmosphere of the time. But as a result, ontology became a sort of introduction to natural philosophy; it served an instrumental function: it gave and justified the concepts of being, substance, act and potency, cause and all the other conceptual equipment needed to carry on a philosophical investigation of nature and of man.

Once Thomism became reestablished and began to enjoy a feeling of stability, philosophers shifted the exposition of their science to the more natural order, beginning with those sensible objects that are more known to us and proceeding upward toward immateriality and to God, the First Principle of reality, Who is most knowable in His own nature. Yet there remained an enticing temptation to compromise this order somewhat, especially in metaphysics. In its sapiential function metaphysics is synthetic and views all of being from the heights of an analogical unity. But in its function as a science of the ultimate principles of reality, metaphysics proceeds analytically, that is, it works up from multiplicity to the peak of wisdom and unity. *The Summa Theologiae* proceeds according to a sapiential order, beginning with God and descending to creatures. It is a properly theological order,[1] and has the advantage

[1] Creaturarum consideratio pertinet ad theologos et ad philosophos, sed diversimode. Philosophi enim creaturas considerant, secundum quod in propria natura

of giving a sublime, over-all view of the universe of being. Small wonder if Thomists, who have depended on the *Summa* as the main font of their philosophical doctrine, have yielded to the synthetic urge and have failed to investigate the truly scientific order that philosophy ought to follow.

Modern Thomists are turning their attention toward reconstructing a genuine Thomistic metaphysics in a properly philosophical order. St. Thomas never wrote a manual of metaphysics. He is above all a theologian, and in his writings the queen of human science is truly a serving-maid: *ancilla theologiae*. We have to piece together the fragments of St. Thomas' metaphysical doctrine according to principles of scientific methodology and order gleaned from throughout his writings. We can hope thereby to reach an understanding of the general plan of metaphysics as it existed in the mind of the Angelic Doctor.

Regarding this work of reconstruction, a sharp disagreement of minds has arisen at the very starting point of metaphysics: the determination of its formal subject, of what metaphysics studies. The discussion is of vital importance, for as one of the parties to it rightly points out, the correct designation of the subject of metaphysics " will determine the whole subsequent development of the science." [2]

After reading the available literature on the question, we have come to the conviction that the controversy cannot be understood except when placed in the broader perspective out of which it arises.[3] The opponents of the view that our studies

consistunt: unde proprias causas et passiones rerum inquirunt; sed theologus considerat creaturas, secundum quod a primo principio exierunt, et in finem ultimum ordinantur qui Deus est; unde recte divina sapientia nominatur, quia altissimam causam considerat, quae Deus est (St. Thomas, *Super Libros Sententiarum.* [ed. Mandonnet and Moos, Paris: Lethielleux, 1929-1947] II, Prologus).

[2] J. Owens, C. SS. R., " A Note on the Approach to Thomistic Metaphysics," *The New Scholasticism*, XXVIII (Oct., 1954), 476.

[3] The discussion was precipitated by a paper of Dr. V. E. Smith read at the convention of the American Catholic Philosophical Association, April, 1954: " The Prime Mover in Philosophy of Nature and in Metaphysics," *Proceedings of the American Catholic Philosophical Association*, XXVIII (1951), 78-94. Since then a number of articles have been written on the subject: G. Klubertanz, S. J., " St.

have led us to accept and which we present in this article are men with a background of historical studies, who are emphasizing that Thomism is a Christian Philosophy, which has grown up in a theological context and should not be separated from its natal theology.[4] St. Thomas' Commentaries on Aristotle, consequently, are held to be expositions of Aristotle's doctrine, rather than authentic sources of St. Thomas' own philosophical thought.[5]

Thomas on Learning Metaphysics," *Gregorianum*, XXXV (n. 1, 1954), 3-17; *id.*, "The Teaching of Thomistic Metaphysics," *Gregorianum*, XXXV (n. 2, 1954), 187-205; *id.*, "Being and God according to Contemporary Scholastics," *The Modern Schoolman*, XXXII (Nov., 1954), 1-17; J. Owens, C. SS. R., *art. cit. supra;* cf. *id.*, "Theodicy, Natural Theology, and Metaphysics," *The Modern Schoolman*, XXVIII (Jan., 1951), 126-137; *id.*, "The Conclusion of the Prima Via," *The Modern Schoolman*, XXX (Nov., 1952), 33-53 (Jan. 1953), 109-121 (Mar. 1953), 203-215. Other articles on this subject will be cited in the course of this article.

[4] The teaching of E. Gilson on this can be gathered *passim* in his works. The following is an example: "It is by restoring the several Scholastic philosophies to their natural places—namely, their natal theologies—that history will better and better succeed in understanding them as they were. *Non erubesco evangelium* is a saying we must know how to pronounce in all domains, even including that of scholarship. And it also is by returning to its natural place that it will once more bring forth flowers, or fruit. Only a prophet will be able to say what is to be the shape of its future. But the historian can safely state by whom Scholastic philosophy will be given a true life in the future. The true Scholastic philosophers will always be theologians." "Historical Research and the Future of Scholasticism," *The Modern Schoolman*, XXIX (Nov., 1951), 10. An associate of Gilson says of his doctrine: "Since, in fact, the philosophy of St. Thomas exists according to the theological order of the *Summa*, the question of recasting it according to a philosophical order is full of dangers. . . . As Gilson insists, the real question at issue is whether we can separate a philosophy from the conditions in which it was born and without which it never existed—and not thereby destroy it. Gilson's own answer is a decided negative." A. Pegis, "Gilson and Thomism," *Thought*, XXII (Sept., 1946), 447. Cf. E. G. Salmon, "Theological Order and the Philosophy of St. Thomas," *Thought*, XXII (Dec., 1946), 667-678.

[5] "There is no philosophical writing of Thomas Aquinas to which we could apply for an exposition of the truths concerning God and man which he considered knowable in the natural light of human reason. His commentaries on Aristotle are so many expositions of the doctrine of Aristotle, not of what might be called his own philosophy. As a commentator, Thomas could add to the text something of his own, but this was not his principal intention. We may find fragmentary expositions of his own philosophical conceptions in some particular treatises, for instance in the *De ente et essentia*. Generally speaking, however, we must resort

It is, of course, historically correct to recognize the influence of theology on the development of Thomist philosophy. But it is incorrect not to recognize the doctrinal independence of philosophy from theology. To submerge philosophy into theology is to destroy it. The science of reason is distinct from the science of faith, and if distinct, it can and must have its own method and order.

Regarding the status of the Commentaries on Aristotle as valid sources of St. Thomas' philosophical thought, we must note that St. Thomas accepted Aristotelianism and made himself its champion against bitter attacks. He sometimes corrects the doctrine or arguments of Aristotle. He always explains, expands and supplements the concise and pithy statements of the Stagyrite. He interprets benignly and at times reads his own thought into Aristotle's text. Surely, we can say that in general the doctrine of the Commentaries is that of St. Thomas; that when he says nothing against the opinions of Aristotle, he is actually accepting them.[6] Moreover, there are many passages in the Commentaries that undoubtedly represent St. Thomas' own doctrine, such as the *Proemium* to the *Metaphysics*, to the *De Caelo* and to the *De Generatione*. Likewise, in the theological works St. Thomas reproduces much of the cardinal doctrine of the Commentaries, including the fundamental methodological principles of the Commentaries. There are in the two *Summae* 41 citations of 25 different passages of the *Posterior Analytics*, over 443 citations of 197 passages from the *Metaphysics*, and many citations from the other works. In addition to all this, we must remember that the medieval mind was more doctrinally than historically inclined, as is evident in the very words of St. Thomas. After mentioning a difference of interpretation by Simplicius and by Alexander of the words of

to his theological writings in order to find them fully developed, but following a theological order." E. Gilson, *History of Christian Philosophy in the Middle Ages* (New York: Random House, 1955), 367.

[6] There may be individual cases where one can argue that St. Thomas is only expounding, not accepting, Aristotle's doctrine, especially if the doctrine contradicts his other works. These would constitute difficulties, but not reasons to discard all the Commentaries.

certain poets and philosophers, especially of Plato, St. Thomas continues:

> Whatever is to be said of these is of little concern to us. For the study of philosophy is not for the purpose of knowing what men have thought, but for knowing what the truth of the matter is.[7]

It is essential for understanding any of St. Thomas' philosophy that it be interpreted in the light of the doctrine of the *Posterior Analytics*, namely, the doctrine of scientific methodology accepted and used by St. Thomas. A science is not any haphazard collection of truths about a subject. It is rather an organic body of demonstrated knowledge of the commensurate properties and causes of a subject in the light of the quidditative knowledge of the subject. The attributes are seen to belong necessarily to the subject, and the subject is seen to be the proper cause of the attributes, through comparing the essential definitions of both. For the definition of the subject is the middle term in at least the first demonstration of a science. The subject must be known as something really existing, for if it does not exist, it cannot be defined. Moreover, the same existing material things can be the subject of more than one science, depending on the formal aspect under which they are considered and the principles whereby they are defined.[8]

The subject of any human science must follow the natural mode of man's knowledge. The proper object of our intellect is the quiddity of sensible things. As St. Thomas says in his *Commentary on the De Trinitate of Boethius*:

[7] *I de Caelo et Mundo* (ed. Leonina, vol. III, *Opera Omnia*, Rome: Typ. Poly. Vat., 1889), lect. 22, n. 8; cf. n. 5.

[8] It is important to keep in mind St. Thomas' terminology regarding the subject and object of a science. The subject is a thing or things in entitative existence. The object is the thing as it exists in knowledge. Both are material and formal. The material subject is the thing simply. The formal subject is the material thing under the aspect whereby it is considered in the science and is commensurate with the properties demonstrated of it. The object of science is the whole scientific process. The material object is the conclusions of the science; the formal object is the definition of the subject, in the light of which the conclusions are deduced. Cf. John of St. Thomas, *Cursus Theologicus* (Parisiis; Desclée et Sociorum, 1931-), In Qu. 1 Primae Partis, Disp. 2, Art. 11. Vol. I, p. 402.

In the speculative sciences, by means of demonstration and definition we can know only those things to which our natural knowledge extends. Now such naturally known truths are revealed to man by the light of the agent intellect, which is natural to man; and nothing indeed is made known to us by this light except insofar as it renders images actually intelligible; for in this consists the operation of the agent intellect. . . . But since we receive images from the sense, our knowledge of the above-mentioned principles begins in the sense and memory. . . . Consequently, such principles do not carry us beyond what we can know from the objects of sense.[9]

Hence we cannot know the quiddity of God and of the separated substances, for their natures transcend the scope of our intellect, and they are not adequately revealed by their effects in the world. At most we can take their effects as the starting point to prove their existence and some of their conditions; but our knowledge will be negative and analogical.[10] God and the immaterial substances, therefore, cannot be the subject of a human science, because we cannot attain a definition of them to use as a middle term in a syllogism.

Our human type of knowledge starts with being: *Id quod primo cadit in intellectu est ens.*[11] This first concept of being

[9] Q. 6, a. 4. Armand Maurer, C. S. B. (transl.), *The Division and Methods of the Sciences* (Toronto: The Pontifical Institute of Mediaeval Studies, 1953), 76.

[10] Si qua ergo res est, quae non habeat principia priora, ex quibus ratio procedere possit, horum non potest esse scientia, secundum quod scientia hic accipitur, prout est demonstrationis effectus. Unde scientiae speculativae non sunt de ipsis essentiis substantiarum separatarum. Non enim per scientias demonstrativas possumus scire *quod quid est* in eis; quia ipsae essentiae harum substantiarum sunt intelligibiles per seipsas ab intellectu ad hoc proportionato; non autem congregatur earum notitia, qua cognoscitur *quod quid est* ipsarum, per aliqua priora. Sed per scientias speculativas potest sciri de eis an sint, et quid non sunt, et aliquid secundum similitudinem in rebus inferioribus inventam. Et tunc utimur posterioribus ut prioribus ad earum cognitionem; quia quae sunt posteriora secundum naturam, sunt priora et notiora quoad nos. Et sic patet quod illa de quibus habetur scientia per ea quae sunt priora simpliciter, sunt composita secundum se ex aliquibus prioribus. (*I Poster.* [ed. Leonina, vol. I] lect. 41, n. 8. Cf. *Ibid.*, lect. 30, n. 7; *In de Trin.* q. 6, a. 3, c; a. 4. *Sed contra et Responsio*). See *Summa Theol.*, I, q. 88, a. 2, where St. Thomas criticizes Avempace, who thought that by a progressive distillation of material being we can come to a knowledge of the separated substances.

[11] *Summa Theol.*, I-II, q. 55 ,a. 4, ad 1.

is not the being of the science of metaphysics, but rather the most imperfect, confused, potential of all concepts. It represents nothing more than a material something, a sensible quiddity, an essence wearing only the rags of the sensible existence that it connotes. This being is signified as an essence, a thing, but with a connotation of the existence it exercises in the individual thing attained by the senses.[12]

Immediately following upon this concept of being, the intellect conceives, at least implicitly, the principle of non-contradiction, for this being cannot both be and not—be at the same time and under the same aspect. This same being, moreover, is doubly divisible: into potency and act and into the categories of being. But let it be noted that this being does not extend explicitly beyond the ambit of material objects.

When we begin to investigate this being scientifically, we find that its most evident characteristic is its instability; it is always changing, coming and going, more or less, here or there. This being is revealed to us by our senses as in continual flux. But by studying the changes of this being, which we can now call mobile being, we learn much about it. We investigate its principles, causes and properties and build up quite a creditable science which we call physics, natural science or philosophy of nature. Physics should, we would expect, treat everything

[12] Cf. *I Periherm.*, lect. 5, n. 20-22 and note ρ (ed. Leon.). It is not exact to say that being is attained only in judgment. It is attained as the first principle in simple apprehension. "In prima quidem operatione est aliquod primum, quod cadit in conceptione intellectus, scilicet, hoc quod dico ens; nec aliquid hac operatione potest mente concipi, nisi intelligatur ens." (*IV Metaphys.* [ed. Cathala, Taurini; Marietti, 1926] lect. 6, n. 605.) As thus conceived, being is essence with reference to existence, for existence is the act and perfection of being, without which being cannot be understood, just as potency cannot be understood without reference to act. When we apprehend being, the accompanying phantasm—without which we cannot think at all (*Summa Theol.*, I, q. 84, a. 7)—expresses the really existing individuals from which the abstract concept has been drawn and to which it has an essential reference. The existential judgment, on the other hand, explicitly affirms the act of existence that simple apprehension had only indirectly grasped as implicit in the concept of being. Cf. Owen Bennett, O.F.M. Conv., "Existence and the First Principles According to St. Thomas Aquinas," *Philosophical Studies in honor of The Very Reverend Ignatius Smith, O.P.*, John K. Ryan, editor. (Westminster, Maryland: The Newman Press, 1952), 165-178.

knowable about material being. It should solve all the problems that our mind might encounter while probing into the mysteries of reality. In fact, the first physicists looked upon their science as just such a thing. St. Thomas says of them:

> The ancients did not think that there was any substance besides corporeal, mobile substance, which the physicist treats. And so it was believed that they alone should treat of all nature, and consequently of being, as well as of the first principles that must be considered along with being. But this is false.[13]

Physics really raises greater problems for us than it solves; at least, it points out deeper, more insistent problems. For it reveals that the first extrinsic principle of mobile being is necessarily an Unmoved Mover. The whole progression of General Physics, the first division of natural philosophy, tends towards and culminates in the proof of the Unmoved Mover, which lies outside the orbit of the senses and out of bounds for physical science.[14] Add to this the proof developed in psychology for the spiritual nature of man's soul and its separate existence after death. Up until this point whenever a philosopher would say being, he would mean material being, for such would be the only kind of being that he knew. A little farm boy who has never been to the big city has a concept of law-enforcement officer that does not transcend the local constable. Whenever he thinks of policeman, he thinks of the constable. But once he has been to the big city and has seen motorcycle policemen, traffic-cops, state troopers and park policemen, his concept of law-enforcement officer is considerably broadened. In the same way, once the philosopher has discovered the existence of immaterial beings, his idea of being is extended and enriched. Physics pierces a hole through the backdrop of sensible reality and reveals an entire new world

[13] *IV Meta.*, lect. 5, n. 593.

[14] It is within the competence of the physicist to prove the existence of God not only from motion, but also from finality. Natural philosophy is concerned at every step with the finality of nature and the orientation of all mobile beings to the good of the whole universe, which is a *bonum ordinis*. A physicist would see that the cause of the order of the *whole* universe would have to transcend the universe.

of being, an immaterial or spiritual realm, which has important influence upon our own world. St. Thomas says, continuing the above quotation at the point where we interrupted him:

> There is another science superior to natural science. For nature, that is, the natural thing, that has in itself a principle of motion, of itself is just one particular kind of universal being. *Not every being is such*, since it has been proved in the eighth book of *Physics* that there is an immobile being. This immobile being is higher and more noble than the mobile being that natural science considers.[15]

It might well be objected at this point that we do not need natural philosophy to prove to us the existence of immaterial being. We have known this from our catechism days. And even apart from faith, we can acquire a pre-scientific knowledge of God by our ordinary common sense. Why appeal to natural philosophy to tell us what we knew already? We could, on the strength of this approach, being philosophy with the science of immaterial being.

We must, however, keep in mind that science proceeds by way of *propter quid* demonstrations. Commensurate attributes are demonstrated of a subject through the definition of the subject from its formal aspect. The premisses of a scientific syllogism, in which the definition of the subject is the middle term, are the causes of the knowledge of the conclusion, and must thereby be better known than the conclusion. If the very formality of the subject, that whose light makes possible the scientific inference, is itself given by faith, then the conclusions caused by this partly revealed definition will participate in the revealed character of their cause. Likewise, if the formal aspect of the subject has been given through the imperfect common sense proof of God's existence, then the conclusions of metaphysics derived through the definition of the subject will share the imperfect, uncritical status of their cause. In order to set up a scientific subject, the formal aspect must be either immediately evident to intellectual intuition or else be made known by a strict scientific process. In no other way

[15] *IV Meta.*, lect. 5, n. 593. Italics ours.

can a subject have the necessity whereby it can cause similar necessity in the conclusion.

There is, therefore, no other scientific way to enter metaphysics than through the philosophy of nature, which gives certain and necessary knowledge of the existence of immaterial beings.

We cannot understand our own world, unless we learn about this immaterial world in which are the ultimate causes of mobile being. But how can we learn about this realm beyond materiality and mobility? Obviously, not directly, for man's direct knowledge is restricted to sensible reality. Nor can principles of sensible, mobile being avail to investigate this immaterial being.[16] Somehow, we must find a bridge to immaterial being. Just as the astronomer has a bridge to worlds far removed from our own, namely, the light that travels between them, so now the human mind seeks principles whereby it can learn about immateriality. As man matures from physics to metaphysics, he seeks something common between the material and immaterial world, whereby we can learn about that world beyond our own. That something held in common is precisely BEING: both worlds are beings, or *existing things*.[17] Being is a perfection possessed by both worlds. It is the only notion that at present we find shared by both. But it is a beginning, and with this notion we can set up a science whose goal is nothing less than the knowledge of God Himself.

[16] Consideratio speculativae scientiae non se extendit ultra virtutem principiorum illius scientiae, quia in principiis scientiae virtualiter tota scientia continetur. (*Summa Theol.*, I-II, q. 3, a. 6, c.) Substantia enim solet dici prima inchoatio cuiuscumque rei, et maxime quando tota res sequens continetur virtute in primo principio; puta si dicamus quod prima principia indemonstrabilia sunt subiecta scientiae, quia scilicet primum quod in nobis est de scientia sunt huiusmodi principia, et in eis virtute continetur tota scientia. (*Ibid.*, II-II, q. 4, a. 1, c.)

[17] Note that by being we do not mean existence alone, but rather essence plus existence: the two are component principles of all beings other than God. There is no question of starting metaphysics with an intuition of pure existence; the existence that our mind attains is always existence limited by an essence. If we had no knowledge of immaterial essences that have a commensurate immaterial existence, then our concept of existence would not transcend the existence of the sensory matter that is the connatural object of our intellect.

We must go back to our study of material being, for a human science such as metaphysics is, must submit to the limitations of human knowledge and find its concepts only by abstraction from sensory experience. But this time we study material being from a new aspect, no longer as mobile, but from this newly discovered dimension of what it has in common with the immaterial world, namely, being. The subject of our science is *ens,* not as *mobile;* but *ens*—the same *ens—in quantum ens.* What exactly does this formula mean?

As a result of the discovery of immaterial being in the eighth book of *Physics,* we have been able to separate in a negative judgment being from material being: "Not every being is such." [18] Now, by a second consideration of our data, we note that in reality there exist both material and immaterial beings. Hence, we see that being itself is a perfection not commensurate with material being only, nor with immaterial being only: it transcends both. Therefore, we make another judgment of separation and say that being itself is neither material nor immaterial.[19] It can be either, because it transcends the modes of material and immaterial. We have a concept now that opens out upon the immaterial order, without, however, being closed on the material order.[20] Hence, being and all the attributes that

[18] *IV Meta.,* lect. 5, n. 593.

[19] It should be noted that the negative judgment which constitutes the subject of metaphysics does not separate existence from essence, but rather being from the modes of material and immaterial. This judgment of separation is expressed by St. Thomas: "It is not of the nature of that which is separate to exist in matter and motion, but it can exist without them although we sometimes find it in them." (*In Boet. de Trin.,* q. 5, a. 4., *trans. cit.,* p. 42.)

[20] "It is important to distinguish well the knowledge, and notably the negative knowledge of the immaterial realities whose nature positively excludes matter, and *separation,* or the relative negative judgment, which disengages being, the object of metaphysics, and the other data of the same order from both the material and the immaterial order, keeping them open, diversely however, upon both orders. To open metaphysics of being upon the immaterial without closing it on the material being of our experience—was not this the major preoccupation of Aristotle? This preoccupation is all the more urgent if we admit with recent historians that it was only in the second stage of his development, after having abandoned the classical definition of first philosophy as theology, that he made being as such the object of metaphysics." L.-B. Geiger, O. P., "Abstraction et separation d'après S. Thomas," *Revue des Sciences Philosophiques et Théologiques,* XXIII (1947), 27. Our transl.

the science of metaphysics demonstrates as commensurate with it are indifferent to material or immaterial existence. This is the profound meaning of St. Thomas' often repeated formula that the object of metaphysics is whatever does not contain matter in its concept or definition, some perfection whose nature is indifferent to materiality, and which can exist either as material or as immaterial.[21] In the first lecture on the *Physics* of Aristotle he says:

> There are some things which do not depend on matter for their existence, nor according to concept (ratio): either because they are never in matter, as God and other separated substances; or because they are not universally in matter, as substance, potency and act, and being itself. Of these Metaphysics treats.[22]

We have, accordingly, isolated the formal aspect of the subject of metaphysics, the transcendental perfection of *that which exists*. But in order to study this perfection by human science, we have to consider it as it is realized in material things. Being itself is neither material nor immaterial, but the subject of metaphysics is certainly material, for metaphysics is a human science. The subject is the same material being known in the first concept of the mind in a confused and imperfect way, investigated by physics under the aspect of mobility and by mathematics as quantified. Now this being is closely analysed from the aspect of the transcendental perfection of being that it possesses. *Ens inquantum ens* means material being from the aspect of being itself, that is, considered from an aspect that does not include matter in its definition and is in fact also realized apart from matter as well as in matter.[23] *Ens in-*

[21] If we had no objective guarantees that metaphysical objects do in fact exist as immaterial entities (i. e., God and separated souls), then our metaphysical concepts would point up immaterial aspects in material things, but with no more realistic value than we grant to St. Anselm's ontological argument.

[22] *I Physic.*, lect. 1, n. 3. Cf. *Summa Theol.*, I, q. 85, a. 1, ad 2; *In Boet. de Trin.*, q. 5, a. 1, c; a. 4, c; *VI Metaphys. Proem*; lect. 1, n. 1162-65 et passim; *De Sensu et Sensato*, lect. 1; etc.

[23] "Metapyhsics has for object the reality of being immune from any matter, even intelligible, whether in the sense of a positive exclusion of all materiality, as in the case of God and the separate substances, or in a simply precisive or abstractive

quantum ens is also designated by the expression *ens commune* as the subject of metaphysics. This latter terminology puts a greater emphasis on the formal aspect.[24]

The fact that *ens commune*, when considered as subject of metaphysics, means the common perfection of being as it is realized in material being is further corroborated by the insistence of St. Thomas that God and the separated substances do not enter into the subject of metaphysics. "The subject in a science is that whose causes and attributes we investigate, but not the causes themselves of any (subject-) genus under inquiry. For the knowledge of the causes of any (subject-) genus is the end attained by the inquiry of the science."[25] Therefore, "it must belong to the same science to investigate the separated substances and being-in-general (*ens commune*), which is the (subject-) genus of which the above mentioned substances are the common and universal causes."[26] The separated substances (including God) are thus distinguished from *ens commune* as cause from effect.

However, even though the subject of this science is being-in-general (*ens commune*), the whole science is said to concern what is separate from matter both in existence and in thought. For not only are those things called separate in existence and thought which can never exist in matter, like God and the intellectual substances,

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sense, as in the case of the notions of being, act, potency, unity and plurality, etc.; this immaterial reality, however, which properly forms the subject of metaphysics, in the technical sense of the word, can be only *ens commune*, that is immaterial being in the second sense, that is, in the precisive or abstract sense, namely, the reason of being that does not positively exclude materiality nor positively imply it in its formal content, for it can be realized in material reality and in spiritual reality." Mariano De Andrea, O.P., "Soggetto e oggetto della metafisica secondo S. Tommaso," *Angelicum*, XXVII (1950), 182. Our transl.

[24] *Ens commune* is varied in signification. As a universal, it is *primum logicum* separated out from material and immaterial beings and existing as such only in the mind. "Multo igitur minus et ipsum esse commune est aliquid praeter omnes res existentes nisi in intellectu solum" (*I Cont. Gent.*, c. 26.) It is this universal concept of being that the science of metaphysics enriches by evolving its virtual transcendentality. *Ens commune* as the formal subject of metaphysics is not this concept, but rather that reality in which we find it, material being.

[25] *Metaphys. Proem.*, A. Mauer (trans.), *op. cit.*, p. 82.

[26] *Ibid.*

but also those which can be without matter, such as being-in-general (*ens commune*).[27]

St. Thomas amplifies this statement in his *Commentary on the De Trinitate of Boethius*:

Something can exist separate from matter and motion in two different ways: First, in the sense that it is of the nature of the thing called separate to be able in no way to exist in matter and motion, as God and the angels are said to be separate from matter and motion. Secondly, in the sense that it is not of the nature of that which is separate to exist in matter and motion, but it can exist without them although we sometimes find it in them. In this sense, being, substance, potency and act are separate from matter and motion because they do not depend on them with respect to existence, unlike mathematicals, which can only exist in matter although they can be understood without sensible matter. Thus philosophical theology treats of beings separate in the second sense as its subjects and of beings separate in the first sense as the principles of its subject.[28]

The subject of metaphysics, then, cannot be that absolutely transcendental being that extends by analogy of proper proportionality from God to creatures, from substance to accidents, and from real to possible and rational being. It is rather what we can call the relatively transcendental perfection of real being, which is studied in material being, but is really independent of materiality.[29] This formality in material being opens up for us vistas of immaterial reality.

[27] *Ibid.* Cf. *Summa Theol.*, I-II, q. 66, a. 5, ad 4; *De Causis*, lect. 6.

[28] *In Boet. de Trin.*, q. 5, a. 4, *transl. cit.*, 41-42.

[29] "The equivalence of the terms: 'ens inquantum ens' and 'ens finitum' is in perfect accord with the proper function that St. Thomas with Aristotle assigns to a science 'propter quid,' which metaphysics must be considered to be, and which is to make known the property of the subject of the science by the analysis of the quidditative notion of the same subject. But for St. Thomas infinite or divine being escapes every essential definition on the part of the human intelligence, as something that is outside its specific natural possibility and hence cannot in any way be a subject of metaphysical science, insofar as it is an expression of the intellectuality proper to man. . . . In conclusion, 'ens inquantum ens,' or 'ens commune,' which forms the subject of metaphysics, cannot, according to St. Thomas, be being in its absolute transcendentality, that is, insofar as it embraces finite and infinite being, but only being in its relative transcendentality, insofar, that is, as it extends

Physics must now yield its claim to primacy. The things that physics would have treated, were there no immaterial being—things such as potency and act, substance and the other predicaments, the causes, the principle of non-contradiction and the defense of the validity of knowledge are found not to be commensurate with material being, but rather with being as such. They enter into the proper scope of metaphysics.[30]

The metaphysician studies being as being and finds it to be in every way dependent and imperfect. It is composed, received, participated, caused, contingent, not only in its intrinsic nature, but also in its operation. Its every facet and every attribute points toward a transcendent, infinitely perfect Cause existing beyond the ambit of human intelligence, but revealed by Its proper effects in the finite realm of *ens commune*. The metaphysician has thus built his bridge on the pillars of sensible reality and suspended it from the cables of existence and causality that span the worlds of the material and immaterial. Though a process of analysis of material being in those highest aspects of the formalities it possesses in common with immaterial beings, the metaphysician arrives at the greatest purely human knowledge of the First Cause of all being. The immaterial dimension of material being is the proper effect of God and it makes God known to us.

But the work of the metaphysician is not yet completed. He has studied material being as mobile. He has investigated *ens commune,* or negatively immaterial being. He has come to know positively immaterial being, that is, God. The passion of the mind for unity still asserts itself. Just as Einstein was

to predicamental being." M. DeAndrea, *art. cit.*, 181. Cf. P. Robert, O.P., "La metaphysique, science distincte de toute autre discipline philosophique, selon S. Thomas," *Divus Thomas* (PL), L (1947), 206 sq.

[30] Si non est aliqua alia substantia praeter eas quae consistunt secundum naturam, de quibus est physica, physica erit prima scientia. Sed, si est aliqua substantia immobilis, ista erit prior substantia naturali; et per consequens philosophia considerans hujusmodi substantiam, erit philosophia prima. Et quia est prima, ideo erit universalis, et erit ejus speculari de ente inquantum est ens, et de eo quod quid est, et de his quae sunt entis inquantum est ens: eadem enim est scientia primi entis et entis communis, ut in principio quarti habitum est (*VI Meta.*, lect. 1, no. 1170).

attempting a unified field theory, a mathematical formula that would apply to all of reality, so the metaphysician now seeks a single concept that will embrace the whole of being, even the Supreme Being and Cause of all. His concept of being has been so refined and extended that in one triumphant intuition he now conceives being in all its transcendental amplitude, extending by proper proportionality from God down to the humblest accident of the least possible being—being that is one—being that is true—being that is good and beautiful to behold!

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ST. THOMAS AND MODERN SEMIOTIC

TWENTIETH-CENTURY logical positivism, the position that all philosophical problems can and ought to be resolved into questions of linguistic analysis, has given a tremendous impetus to semantic studies. One consequence of this quickened interest has been that certain men, recognizing the essential sign-function of language and perceiving the importance of non-linguistic signs in the various fields of human endeavor, have envisioned a new organon of scientific study, a new universal science, a science of signs (termed "semiotic"), in terms of which all other scientific investigation might proceed and be expressed.

In view of the importance attached by many to a general theory of signs, it behooves the Thomist to examine his own position on this question and to compare it with that held by present-day "semioticians." Accordingly, the aim of this article is to present St. Thomas' view of the nature of signs and to compare that view with the semiotic theory proposed by Dr. Charles Morris, who is representative of the modern position and is one of the foremost workers in the field.

It is not surprising that there is no fully-developed theory of signs in the writings of St. Thomas, for he was primarily a theologian and, as such, was not vitally concerned with the problems of semiotic except insofar as they might be related to theology itself or to some part of philosophy which was so related. Fortunately for our purpose, however, logic is a prerequisite for any science, whether theological or philosophical and logic as conceived by St. Thomas involves some consideration of semiotic, especially that part of semiotic which deals with language. In theology, moreover, a certain theory of signs is presupposed, for example, in any study of the Sacraments, which are by definition a certain type of sign, and also in any consideration of vocal prayer.

From these sources, then, it is possible to extract a rather clear indication of the direction a fully-developed Thomistic theory of signs would have taken. In fact, it seems possible to find in St. Thomas an incipient semiotic with at least some suggestion of all the important distinctions a modern semiotician introduces into his theory.

In his explicit treatment of logic, St. Thomas systematizes his theory according to the framework provided by Aristotle. Because, according to Aristotle, there are three acts of the intellect and because logic is the science which treats of these acts, it is fitting that logic should have a corresponding tripartite division.[1]

The first act of the intellect is simple appprehension, the intellectual cognition of some nature; to this act corresponds that division of logic which treats of definition.[2] To judgment, the second act of the intellect, corresponds the study of propositions.[3] Finally, the process of ratiocination, the third act of the intellect, is correlated with a formal treatment of the syllogism.[4] According to this division, St. Thomas takes up in his exposition of Aristotle's *Peri Hermeneias* the question of linguistic signification, a question essential to any serious consideration of propositions.[5]

[1] Cf. St. Thomas, *In libros Peri Hermeneias Expositio*, Lib. I, lect. 1: "Cum autem Logica dicatur rationalis scientia, necesse est quod eius consideratio versetur circa ea quae pertinent ad tres praedictas operationes rationis." Cf. also, *In I Posteriorum Analyticorum*, Lib. I, lect. 1: "Eadem ratione ars quaedam necessaria est, quae sit directiva ipsius actus rationis, per quam scilicet homo in ipso actu rationis ordinate, faciliter et sine errore procedat." "Et haec ars est *Logica*, idest rationalis scientia. Quae non solum rationalis est ex hoc, quod est secundum rationem (quod est omnibus artibus commune); sed etiam ex hoc, quod est circa ipsum actum rationis sicut circa propriam materiam."

[2] Definition and that upon which it depends, genus, differentia, and predication, are treated in Aristotle's *Categories*.

[3] Considered by Aristotle in his *Peri Hermeneias*, or *On Interpretation*.

[4] Considered by Aristotle in the *Prior* and *Posterior Analytics*, *Topics*, and *Sophistical Refutations*.

[5] While the *Aristotelis Peri Hermeneias Expositio* is ostensibly a mere explanation of Aristotle, a comparison of the two texts reveals that the explanation is not simply a restatement of the original. It appears to express St. Thomas' own thought; moreover, in view of the fact that what is found here is in perfect accord with St.

The title of St. Thomas' work, *De Interpretatione* in Latin, has a technical meaning which cannot be rendered by the English "interpretation." [6] Boethius, in his work of the same title, defined *interpretatio* as "a meaningful vocal sound which is in itself expressive of something other than itself," [7] and it is this meaning of *interpretatio* that St. Thomas adopts with certain qualifications. Accordingly, conjunctions and prepositions are not *interpretationes*, for they do not in themselves give knowledge of something other than themselves. Similarly, vocal sounds which are significant, not by resolution or design, but naturally, such as the roaring of lions or the barking of dogs, cannot be called *interpretationes*. They cannot because whoever uses an *interpretatio intends* to convey some knowledge, to express some thought. Therefore, only nouns, verbs, and sentences can be called *interpretationes;* and even of these the first two ought rather to be called *principles* of *interpretationes*, for of themselves they do not express anything of which it can be said that it is true or false.

In short, only an enunciative sentence, that is, a sentence which is either true or false, is really an *interpretatio*. Other sentences, subjunctive and imperative, for example, are ordered to expressing one's feelings and desires, to directing the actions of others, rather than to signifying what one thinks: they are not pertinent to science; they belong to the arts.

Having defined his subject matter, St. Thomas turns to a detailed analysis of each part of the definition, treating in turn each of the following topics: the signification of vocal sounds, the diverse kinds of signification, the material and formal principles of sentences, the definition of an enunciation, and the types of enunciative sentences.

There are three types of signs by means of which man can attain to a conceptual knowledge of things: by writing, by

Thomas' other writings, there is an added indication that one is justified in holding the *Expositio* to be an expression of what St. Thomas took to be the truth and not merely of what Aristotle had said.

[6] Cf. the Leonine *Opera omnia*, vol. 1, pp. 7-8, n. γ, for a discussion of ἑρμηνείας.

[7] "Interpretatio est vox significativa, per seipsam aliquid significans."

spoken words, and by his own intellectual concepts abstracted from sensible things. Were man naturally a solitary animal, he would have no need for any signs other than his concepts; but, since he is by nature political and social, there is required some means by which one man's ideas may be made known to others. Moreover, since man desires to communicate, not only with those who are in his presence, but also with those who are at a distance or who will live at some future time, it is necessary that he have a system of writing.[8]

A distinction must be made between vocal sounds uttered simply as an expression of some emotion (*passio animae*), moaning, for example, and those which by human convention convey information about one's thoughts (*conceptio intellectus*). Only the latter are truly *interpretationes*, and it is to be noted about these that they do not signify *immediately* anything other than one's thoughts. That is, for instance, the word "man" does not directly signify individual men, but rather human nature in the abstract directly and individual men only through the mediacy of the concept. The signification of written words is a further degree removed from simple denotation of objects, for writing signifies the spoken word directly, the concept through the spoken word, and individual objects through the concept.[9]

While it is natural to man to make use of words to express his concepts, that a given word should express a particular concept is determined by human convention. This is evident from the fact that various groups of men use differing terms to express the same thought. The concepts themselves, it is to be noted, are the same for all men, for they are "similitudes" of the things they signify.[10] Similarly, vocal sounds which express

[8] St. Thomas, *op. cit.*, lect. 2.

[9] *Ibid.* To signify is not to denote; signification has to do with the intension of a term rather than its extension; particulars are signified only inasmuch as they have a certain nature; it is the nature, properly speaking, which is signified by a term or concept.

[10] Cf. *ibid.*: ". . . res non cognoscitur ab anima nisi per aliquam similitudinem existentem vel in sensu vel in intellectu."

mere feelings and are *naturally* significant are uniform among men.

Because there are diverse intellectual conceptions, the words which are used as signs of such concepts are also diverse in their signification, for a sign must conform to what is signified. That is, just as there is an act of understanding in which there is neither truth nor falsity (simple apprehension) and another act in which there is necessarily one or the other (judgment), so there are vocal expressions which signify without any implication of truth or falsity and others which do carry such an implication.

The " truth " which is in question here is, of course, not " metaphysical " truth, which is the conformity of things to the divine intellect; nor the " truth " of those who would make the human intellect the measure of all things so that whatever is thought is true; nor is it the " practical " truth which is found in human artifacts which correspond to the mind of the artist.[11] Neither is it the truth which consists simply in the conformity of the human intellect to extra-mental objects, the intellect resembling something to be assessed and the object a kind of criterion according to which the assessment is to be made. Rather, the truth in question is in the *judgment* that one's conceptions *are* conformed to reality.

Accordingly, while the simple intellectual apprehension of some essence or nature is true, and even necessarily true,[12] the truth which is the criterion of diverse types of signification is found only in a judgment, in an act of " composing and dividing." If such an act is in conformity with reality,[13] that is, if the intellect judges something to be which in reality is, the judgment is true; if, on the other hand—and there is no middle

[11] What is said here about truth is taken from *ibid.*, lect. 3.

[12] Since all man's ideas originate in experience, it is impossible that he should have any simple conceptions which do not correspond to reality.

[13] Such a judgment is not to be confused with a complex concept (to be discussed later), that which constitutes the " matter " of the judgment. It is not the conformity of such a complex concept to reality that constitutes the truth in question; it is the *judgment* that there *is* such a conformity. Cf. St. Thomas, *op. cit.*, lect. 3.

ground possible——the intellect judges a thing to be which in reality is *not,* the judgment is false. The signs, then, which signify without the implication of truth or falsity are nouns and verbs, which, taken by themselves, are expressive merely of simple apprehensions.[14] Only enunciative statements signify in such a way as to be true or false, to be *interpretationes* in the strict sense. Moreover, as has been mentioned previously, man does not use language signs except to convey to another some judgment that he has made or else to express his feelings or desires (*affectiones*). Neither of these purposes can be accomplished by the simple use of nouns or verbs in isolation, unless there is an added sign such as the tone of voice or a gesture.[15] Therefore, nouns and verbs are not, strictly speaking, *interpretationes;* neither are they in isolation effective in any of the usages man makes of language signs.

While signification belongs primarily to language signs which are declarative sentences, it is within the domain of a study of language signs to investigate the elements, the nouns and verbs which enter into any significant statement and are as its "material principles,"[16] or integral parts.

There are five points which enter into the definition of a noun, all of which, except the fourth, are true also of verbs. First, generically a noun is a vocal sound; secondly, it is a sign; thirdly, it signifies by human convention; fourthly, it signifies without any temporal implication; fifthly, none of its parts is significant in isolation from the whole. With respect to the first three points, sufficient has already been said. With respect to

[14] Pronouns are included in the class of nouns, participles in the class of verbs. In cases of grammatical ellipses, a noun or verb taken alone may signify a judgment, but that is only because the hearer or reader supplies the missing words.

[15] One who doubts this statement may verify it by saying, in a normal tone of voice, "fire," or "running," or "green" to another. The normal response is invariably, "What about 'fire'?" or "Who's 'running'?" or "What's 'green'?" It is quite obvious that we expect one who speaks to express a judgment, signify a desire, issue a command, or ask a question. Cf. St. Thomas, *op. cit.*, lect. 5.

[16] Cf. *ibid.*, lect. 4, p. 19, § 1: ". . . determinat principia quasi materialia enunciations, scilicet, partes integrales ipsius. . . ."

the question of temporal implication, however, some clarification is in order.

Words may be expressive of time in three ways: those which signify time as a kind of thing, e. g., " day," " year "; those which signify some way of measuring time, e. g., " yesterday," " tomorrow "; and those which express something which is measured by time; and so words which express action or passion, e. g., " walk," " being-carried," belong to this class. Words which are expressive in the first of the three ways mentioned are nouns; in the second, abverbs; in the third, verbs. Adverbs, it will be noted, are given no further consideration, for only the elements requisite for a significant sentence are under investigation.[17]

Because a noun is meant to express a single, incomplex mental conception, no part of a noun is significant if separated from the whole; it is only in the case of *an oratio,* which signifies a complex mental conception, that the parts are themselves significant. For example, the term " black-eyed-Susan " is not a sign of blackness or the possession of eyes or of Susan—though the origin of the term results from the signification of the parts —rather, it signifies only as a whole and evokes knowledge only of the single idea which represents the flower in question. On the other hand, an expression such as " black eye " represents a complex conception; each part is significant of an element of the complex conception; the expression is, therefore, an *oratio* rather than a noun.[18]

While nouns can be either subjects or predicates in a proposition, verbs are restricted to predication. An infinitive, which may be a subject, as in *ambulare est moveri,* signifies an action or passion in the abstract and, therefore, without any implication of time; it is, accordingly, a noun rather than a verb. Similarly, a word such as *curro* taken in its material supposition, that is, as signifying the word itself, is a noun, not a verb.

Because a verb always indicates a predicate, that is, that

[17] Cf. *ibid.,* p. 20 § 7. [18] *Ibid.*

which is said of another as inhering in that other, and because every predication requires a verb, every verb can be said to "consignify" the composition by which subject and predicate are combined, the inherence of the predicate in the subject. That is, though a verb such as "walks" in "Socrates walks" formally signifies a *certain kind of action* which is found in Socrates, since it also carries the implication that the action is *in* Socrates, it can be said to "consignify" the relation of inherence, or the composition of subject and predicate. Similarly, while the word "is" *signifies* some act, substantial, formal, or accidental, it also *consignifies* the composition of subject and predicate.[19] It is by reason of the verb's consignification of composition that discourse can be said to be true or false.

* * * * *

Hoving considered an enunciation's material principles (nouns and verbs), St. Thomas proceeds to a treatment of the *oratio*, the formal principle. An *oratio*, like a verb, is a vocal sign; it is distinguished, however, by the fact that it expresses, not a simple concept, but a composite idea. Moreover, at least some part of the *oratio* must be significant when isolated from the whole. It is to be noted in this connection that not *every* part need be so significant, for negations, and other syncategorematic words which can be components of *orationes* ("*not*-human," "*all* men," "*no* men," for example) do not of themselves signify anything absolutely, but only the status of one thing with respect to another.[20]

An *oratio*, as the words of which it is composed, signifies by human convention. There are some, however, who have argued

[19] *Ibid.*, lect. 5: "Ideo autem dicit quod hoc verbum EST consignificat compositionem, quia non eam principaliter significat, sed ex consequenti; significat enim primo illud quod cadit in intellectu per modum actualitatis absolute: nam EST, simpliciter dictum, significat *in actu esse*; et ideo significat per modum verbi."

[20] *Ibid.*, lect. 6: "Signanter autem non dicit: *Cuius pars est significativa aliquid separata*, sed *cuius aliquid partium est significativum*, propter negationes et alia syncategoremata, quae secundum se non significant aliquid absolutum, sed solum habitudinem unius ad alterum."

that such is not the case, and they have given the following argument: [21] Any natural power ought to have natural instruments, for nature does not fail to supply that which is necessary for its operation. Now the power of expressing one's thoughts is a natural power, and *orationes* are the natural instruments. Therefore, *orationes* have a natural, not a conventional, signification. This argument, however, is fallacious, for the natural instruments supplied for expressing one's thoughts are the throat and lungs, by which the voice is formed, and the tongue, teeth, and lips, by which vowels and consonants are articulated. *Orationes,* then, are not the instruments, but rather the effects of instruments; as such, they are artifacts, not natural things. Moreover, the power of communicating one's thoughts is a rational rather than a motive power; it belongs to the intellect, which moves the corporeal powers to produce vocal sounds. Consequently, *orationes* are, if instruments at all, instruments of the *intellect* and, therefore, an argument from the nature of *corporeal* beings (philosophy of nature) does not apply.

The enunciation, like the *oratio,* expresses a complex mental conception; e. g., " good men "; it adds, however, the requirement that the expression be either true or false; e. g., " All men are good." An enunciation, by definition, is an *oratio* in which there is truth or falsity; that is, an expression of a complex concept which either does or does not conform to reality.[22]

Besides enunciations there are four other kinds of " perfect " *orationes,* that is, *orationes* which are complete sentences inasmuch as they make perfect sense to the hearer and do not, as " imperfect " *orationes,* leave him in intellectual suspense. These four kinds of sentences, *deprecativa, imperativa, interrogativa,* and *vocativa,* are not intended to express what one knows, but rather to direct and order others in accordance with one's knowledge.[23] A vocative sentence directs another to

[21] *Ibid.*

[22] *Ibid.*, lect. 7.

[23] *Ibid.* For St. Thomas, to direct, to order, to command are acts of the intellect rather than of the will; therefore, even non-enunciative statements are more truly instruments of the intellect than of the will.

give his attention; an interrogative, to respond vocally; an imperative sentence directs an inferior to perform some action; a deprecative, a superior. Related to the deprecative sentence, and reducible to it, is the optative, because with respect to one's superior one directs actions through the expression of one's desires. Similarly, a sentence which expresses a doubt is reducible to the interrogative sentence. In none of these is there a question of truth or falsity.

Logic deals only with the enunciative statement; to rhetoric or poetics belong the other four.[24] The reason for this " division of labor " lies in the purpose the logician has in mind. Logic is ordered to demonstrative science, its purpose is to lead men to consent to the *truth,* having been convinced by reason alone. Consequently, it will deal only with those sentences which signify things as being known truly. The rhetorician and poet, on the other hand, are interested in obtaining others' assent to their own desires or intentions, not only through the words they use, but also by arousing various emotions in their hearers. Inasmuch, however, as any of these sentences can be studied with respect to their appropriate construction, they are within the domain of the grammarian.

One further step in the consideration of enunciative statements is necessary as a preliminary to reasoning: the division of such statements into those which affirm and those which deny a predicate of a subject, and the division into those which are singular, universal, indefinite, and particular. The nature of affirmative and negative propositions is quite evident; it need only be mentioned that for St. Thomas the affirmative proposition is prior, for there can be no division except of what is composed, and the affirmative proposition expresses the re-

[24] Cf. *I Poster.*, lect. 1: " Quandoque vero, non fit complete fides vel opinio, sed *suspicio* quaedam, quia non totaliter declinatur ad unam partem contradictionis, licet magis inclinetur in hanc quam in illam. Et ad hoc ordinatur *Rhetorica.* Quandoque vero sola existimatio declinat in aliquam partem contradictionis propter aliquam repraesentationem, ad modum quo fit homini abominatio alicuius cibi, si repraesentetur ei sub similitudine alicuius abominabilis. Et ad hoc ordinatur *Poetica*; nam poetae est inducere ad aliquod virtuosum per aliquam decentem repraesentationem. . . . "

quisite intellectual composition. The negative proposition merely adds a negative particle to the affirmative.[25]

The remaining division of propositions is somewhat more complicated. If the concept which is signified by the subject of a proposition denominates an object by representing the qualities or attributes that are proper to that object as an individual, then the proposition is singular. Should the signified concept denominate an object by representing the qualities or attributes that object has in common with other objects, then the proposition is universal, particular, or indefinite.[26] The universal proposition is one in which the predicate is affirmed or denied of every object having the nature signified by the subject; in the particular proposition the predicate is affirmed or denied of *some* of the objects signified. Where there is no word such as " all," or " some " to indicate that the predicate is affirmed or denied either universally or " particularly," the proposition is indefinite.

With these distinctions made, it may be said that the constituents of linguistic communication have been enumerated and a foundation for reasoning provided.

Beyond the material presented from St. Thomas' works on logic, a few statements can be gleaned from other treatises. Since these statements are, for the most part, brief, unconnected parenthetical passages, it seems advisable to present them according to the work in which they are found.

In his *Commentary on the First Book of the Sentences* St. Thomas tells us that words are of three kinds: of the heart, of the voice, and of the imagination.[27] The imaginative voice is necessary because speaking is a motor action (not merely a reflex) and every motor action is accompanied by some imagination of the action to be performed. Moreover, because the action is a deliberate action of a rational being, it must be preceded by intellectual deliberation and judgment, the *verbum*

[25] *Ibid., I Periherm.*, lect. 8.

[26] *Ibid.*, lect. 10.

[27] *I Sent.*, d. 27, q. 2, a. 1: " . . . invenitur triplex verbum: scilicet cordis, et vocis, et quod habet imaginem vocis. . . ."

cordis, or *verbum rei, quia est immediata similitudo ipsius rei.*[28] This, of course, is quite in keeping with St. Thomas' frequent designation of the concept as a *verbum*, a designation which is the source of theological analogies, one of which forms the context from which the above statement was abstracted.

In the *Commentary on the Fourth Book of the Sentences*, a different threefold division of signs is made: signs are demonstrative if they signify something in the present, rememorative if they signify what is past, and prognostic if they signify the future.[29]

In the same place it is said that all sensible creatures are signs of the divine which is invisible.[30] Closely related to this is the fact that every effect can be a sign of its cause. Moreover, because some effects are not sensible, but immaterial, it follows that not every sign is sensible.[31]

In the *First Part* of the *Summa Theologiae* St. Thomas says that words are signs of thoughts and thoughts are similitudes of things; therefore, it follows that words signify things through the mediacy of an intellectual concept.[32] With respect to words referring to God, however, some distinctions must be made. In this life, it is impossible for us to know God in His essence; rather, we know Him by means of His creatures, as their cause, but as exceeding them in perfection and as free from all limitation. For this reason we can give a name to God, not, however, as if such a name signified the divine essence as it is, as " man " expresses the essence of man as it is.[33]

[28] *Ibid.*

[29] *IV Sent.*, d. 1, q. 1, a. 1: " . . . triplex est signum; scilicet demonstrativum, quod est de praesenti; rememorativum, quod est de praeterito; prognosticum, quod est de futuro."

[30] *Ibid.*: " . . . omnes creaturae sensibiles sunt signa invisibilium divinorum."

[31] *Ibid.*, qcla. 2: " . . . omnis effectus suae causae signum esse potest. Sed quidam effectus sunt spirituales, qui nullam speciem ingerunt sensibus. Ergo non omne signum aliquam speciem sensibus ingerit . . . non omne signum est sensibile."

[32] *Summa Theol.*, I, q. 13, a. 1, c.

[33] *Ibid.*; " Deus in hac vita non potest a nobis videri per suam essentiam; sed cognoscitur a nobis ex creaturis, secundum habitudinem principii, et per modum excellentiae et remotionis. Sic igitur potest nominari a nobis ex creaturis: non tamen ita quod nomen significans ipsum, exprimat divinam essentiam secundum quod est,

The *Prima Secundae* yields simply a declaration that words hold the first place among the signs men use in communicating with one another.[34] The *Secunda Secundae*, however, is more fruitful. It is here, in a treatment of vocal prayer, that St. Thomas shows how words can be used to arouse the thoughts and desires they express. In answering the question whether one ought to use words in prayer since anything sensible withholds men from ascending to God, he states that words pertaining to something other than devotion distract the mind and impede the devotion of the one who is praying, but words pertaining to devotion stir up the mind, especially in those who are not so devout.[35] These words, however, are of no use in making something known to God, Who already knows all things, but they serve to lift up to God the mind of the one who prays or of some other who hears him.[36]

There are, in fact, three reasons for using words in prayer: first, to stir up within oneself the devotion by means of which the mind is raised to God. The human mind is moved to thought and, consequently, to affections and desires through the medium of exterior signs, whether they be vocal or of some other kind. However, if one's mind is distracted or impeded by signs, he ought not to use them. Secondly, the use of words in prayer is a kind of payment of a debt; that is, since man has received everything from God, the physical as well as the spiritual, he ought to serve God, not only by good thoughts, but also by their physical expression in words. Thirdly, vocal prayer can be the result of a certain overflow of the soul into the body due to the vehemence of one's affections.[37]

In the same work we are told that there is a difference

sicut hoc nomen *homo* exprimit sua significatione essentiam hominis secundum quod est." Cf. also *ibid.*, ad 2.

[34] *Ibid.*, I-II, q. 55, a. 4, ad 2. Cf. also III, q. 60, a. 6, ad 2.

[35] *Ibid.*, II-II, q. 83, a. 12, ad 2: ". . . verba ad aliud pertinentia distrahunt mentem, et impediunt devotionem orantis. Sed verba significantia aliquid ad devotionem pertinens excitant mentes, praecipue minus devotas."

[36] *Ibid.*, ad 1: ". . . vocalis oratio non profertur ad hoc quod aliquid ignotum Deo manifestetur: sed ad hoc quod mens orantis vel aliorum excitetur in Deum."

[37] *Ibid.*, c.

between the reason we direct words to other men and the reason we direct them to God. We direct words toward other men that we might make known to them the otherwise unknowable thoughts that we have. Similarly, we praise a man vocally that we might make known either to him or to others the good opinion we have of him and that, through making it known, we might incite him to even better actions and induce the others who hear us to share our opinion and to revere and imitate the one who is praised. When we direct words to God, however, we do not intend to make our thoughts known, but to induce ourselves and our hearers to reverence Him. Therefore, it is necessary that we praise God verbally, not indeed for *His* sake, but that our own affections might be stirred up.[38]

In treating the question of lying, St. Thomas says that one can lie, not only by verbal expressions, which hold the principal place among signs, but also by intending to signify something untrue by moving the eyes or the head in a certain way.[39] Moreover, lying is evil by its very nature, for, as words are naturally signs of one's thoughts, it is unnatural and unjust that anyone should verbally signify something which he does not really have in his mind.[40]

The use of signs is peculiarly human, we are told in this same question. Every enunciation is an act of reason relating a sign to something signified, for every representation consists in some comparison, and comparison belongs properly to reason. Therefore, even though brute animals make certain things known, they do not intend to do so; it is by natural instinct that they perform some action one of whose consequences is to make a certain thing manifest.[41]

Finally, in the *De Veritate* there is a definition of signs: nothing, properly speaking, can be called a sign unless it is something by means of which one may attain to the knowledge of something else in a "discursive" way, that is, not by the type of knowledge proper to "intelligent" rather than

[38] *Ibid.*, q. 91, a. 1, c.
[39] *Ibid.*, q. 110, a. 1, ad 2.
[40] *Ibid.*, a. 3, c.
[41] *Ibid.*, a. 1, c.

" rational " beings. Therefore, signs for us are sensible things; for our knowledge, which is " discursive," arises from sensibles. But in a wider sense, a sign can be said to be anything which is known and by means of which some other thing is known; according to this usage a concept can be said to be a sign of a thing whereby the thing is known.[42] It is not required that the sign be either a cause or that it be an effect, but only that it be pre-cognized; therefore, an effect may be a sign of a cause, as the pulse is a sign of one's health, or a cause may be a sign of an effect, as meteorological conditions are a sign of impending weather.[43]

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In view of what has been garnered concerning St. Thomas' theory of signs, what observations can be made as a result of comparing it with the semiotic expressed by Dr. Morris in *Signs, Language and Behavior?*

What seems at first sight to be the most significant difference is St. Thomas' " mentalistic " approach as opposed to Dr. Morris' behavioral approach. For Dr. Morris a sign is a preparatory stimulus[44] which takes the place of a " stimulus object "[45] in causing a disposition to respond with a certain type of goal-seeking behavior if other conditions are then fulfilled. For instance, the sound of a dinner bell is a stimulus inasmuch as it constitutes a physical energy which acts upon the ear of the person who hears it. The person, however, does not respond to the sound or the bell itself with any goal-seeking behavior, but is disposed by the ringing to respond to the dinner of which it is a sign. The certain other conditions would be, for example, that the person be hungry, that he be free to respond, etc.

[42] *De Veritate*, q. 9, a. 4, ad 4.

[43] *Ibid.*, ad 5.

[44] *Signs, Language and Behavior* (New York: Prentice-Hall, 1946), p. 8: " A *preparatory stimulus* is any stimulus which influences a response to some other stimulus."

[45] *Ibid.*: " By a *stimulus* is meant . . . any physical energy which acts upon a receptor of a living organism; the source of this energy will be called a *stimulus-object*."

The " disposition to respond," which seems to be the crucial point of the entire formulation, is not completely clarified, the absence of such clarification being due to Dr. Morris' opinion that this constitutes a psychological problem and that semiotic can quite well proceed without such clarification. However, the term " interpretant " is introduced to signify this disposition caused by a sign.[46] What a sign *signifies*, however, is not the disposition to respond, nor even the stimulus-object for which the sign is a substitute; what is signified (the *significatum*) is the complex of qualities or conditions which a thing or situation must have to permit it to be an object of the behavior response to which the organism is disposed by the sign. In the example of the dinner bell, what is signified, then, is not the dinner, but the complex of qualities which anything must have to be a dinner.

Whatever has these qualities is a *denotatum* of the sign, a possible object of the goal-seeking behavior to which the organism is disposed.[47]

All of this behavioristic approach, Dr. Morris tells us, is " an attempt to carry out resolutely the insight of Charles Peirce that a sign gives rise to an interpretant and that an interpretant is in the last analysis ' a modification of a person's tendencies toward action.' " [48] It does not follow, however, that persons do not have feelings and thoughts, that man is merely a complex which responds to physical stimuli according to iron-clad physical laws. The approach is meant to be a methodological one; that is, since semiotic is meant to be a science and science is based on what can be known by observation, what semiotic must take into account is observable behavior. Moreover, " all ' mentalist ' terms may turn out to be incorporable within a behavioral semiotic." [49] For instance, an " idea " may be the same as an " interpretant."

[46] *Ibid.*, p. 18.

[47] Dr. Morris proposes that this use of *significatum* and *denotatum* removes any temptation to posit Platonic ideas or other types of " subsistences " as *objects* denoted by the signs. *Vide, ibid.*, p. 19.

[48] *Ibid.*, p. 28.

[49] *Ibid.*, p. 30.

On the basis of the limited information we have concerning St. Thomas' opinion on this question, and on the basis of the Thomistic system in general, it seems that the following points of similarity to Dr. Morris' theory are evident: A science, for St. Thomas too, must be based on what is observable; certainly, the only means we have for knowing whether or not sign behavior takes place in young children, in the mentally incompetent, and in brute animals, is by observing what they do. Even in the case of normal adults, as Dr. Morris notes, the reports they give of their self-observations are often unreliable and must be checked by other means. In fact, the words in which such persons make their reports are themselves a type of behavior, and it is only because the words *are* something sensible that we are able to observe them, that they are able to be a sign to us of that person's own sign behavior.[50] However, this does not mean that deductions from observations may not lead to a conclusion that there is something "mentalistic" about sign behavior. In fact, as has been mentioned, St. Thomas does not limit signs, in the wider sense, to physical stimuli; an idea is itself a sign.

St. Thomas would agree that the nature of Dr. Morris' "disposition to respond" is a question belonging to the domain of psychology (scientific psychology, for St. Thomas, also proceeds by means of intelligent observation); nevertheless, since there is a type of psychology embodied in the Thomistic system, a Thomistic theory of signs is bound to be linked with such a psychology. That is, the nature of the "interpretant" is bound to be something *cognitive;* every sign, inasmuch as it is a sign, directly causes knowledge; it effects in the sign interpreter a certain sense image or idea.[51] In the case where the interpretant

[50] Cf. *Summa Theol.*, III, q. 60, a. 4, ad 1: "Effectus autem sensibilis per se habet quod ducat in cognitionem alterius, quasi primo et per se homini innotescens: quia omnis nostra cognitio a sensu initium habet. Effectus autem intelligibiles non habent quod possint ducere in cognitionem alterius nisi inquantum sunt per aliud manifestati, idest, per aliqua sensibilia. Et inde est quod primo et principaliter dicuntur signa, quae sensibus offeruntur. . . ."

[51] Cf. *ibid.*, c.: "Signum autem est per quod aliquis devenit in cognitionem alterius."

is an idea, or concept, there is something analogous to Dr. Morris' *significatum;* that is, the content of an idea, or its *ratio,* is that nature or complex of qualities which anything must have to be denoted by the sign which caused the concept. However, it would seem that for St. Thomas only language signs could truly be said to denote.

For example, pronunciation of the word " man " produces a certain physical energy which acts upon the auditory receptor and, through a complicated process, results in the hearer's forming a concept or idea of man. The original word does not signify this particular concept had by this particular person, but rather the content of the concept, rational animality, that nature which must be found in any being before it can be said to be a man, before it can be a *denotatum* of the term " man." [52]

To what extent, for St. Thomas, is a concept, which we have correlated with Dr. Morris' " interpretant," really a disposition to respond? Strangely enough, the answer to this question depends upon the answer to the ancient question of the relative importance of intellect and will. In the face of St. Thomas' judging the intellect to be superior, it must be said that a concept is not essentially, or even in its most important aspect, a disposition to respond; that is, knowledge is not *ultimately* for the sake of any action which depends upon the will; rather, knowledge holds the ultimate place in the series of human goals. Nevertheless, since all willed actions are what they are by reason of the knowledge the agent has (though this is not the sole cause of their specification), and since any knowledge contains at least the possibility of influencing behavior, a concept can be said, in some sense, to be a disposition to respond.[53]

[52] For St. Thomas, as we have seen, the concept becomes in turn a sign of any being which has the nature represented by its *ratio.* That is, the " interpretant " signifies what Dr. Morris would call the *denotata* of the original sign, but signifies them only inasmuch as they have the nature represented by the concept.

[53] Cf. *Summa Theol.*, II-II, q. 83, a. 12, c.: " Quia per exteriora signa . . . movetur mens hominis et secundum apprehensionem et *per consequens secundum affectionem.*" (Italics added.) Cf. *I Poster.*, lect. 1, p. 138, § 1: " Alia enim animalia quodam naturali instinctu ad suos actus aguntur; homo autem rationis judicio in suis actionibus dirigitur." For St. Thomas, it must be noted, a sign

This, however, would not constitute a definition of "concept." Nor is every interpretant a concept. Since it is necessary only that a sign be a means of attaining to a knowledge of something other than the sign itself, and since there are two levels of knowledge, sensuous and intellectual, the sense image, or "phantasm," may also be an interpretant. In the case of brute animals, this would necessarily be true of all signs.

With respect to the stipulation Dr. Morris makes that the response be one of goal-seeking behavior, there is no possibility that St. Thomas should disagree; it is even *metaphysically* impossible in his system that there should be any behavior which is not ordered to some goal or "end." [54] Moreover, in the case of human or animal actions, the goal must be represented to the agent by means of some sign. Not only does every sign dispose to goal-seeking behavior, but all such behavior depends upon signs.

"response" would not necessarily be "any action of a muscle or gland"; it might well be a non-physical act, an act which would be only *indirectly* observable by someone other than the agent. While it is true that the judgment of the practical intellect is the immediate "disposition to respond," this judgment is dependent in part upon speculative knowledge. General ethical principles are speculative, and yet we do expect different responses from those who know certain ethical principles than we expect from those who are ignorant of the same speculative principles. Of course, the practical judgment intervenes, and our expectations may not be realized. The practical judgment might be considered as one of those "additional conditions" under which the response in question takes place. Cf. Morris, *op. cit.*, p. 9.: "A disposition to respond to something in a certain way is a state of an organism at a given time which is such that under certain additional conditions the response in question takes place. These additional conditions may be very complex. An animal disposed to go to a certain place to obtain food may not go there even if food is observed—he may not be willing or able to swim across an intervening water barrier. . . . The complex of conditions also includes other states of the organism."

[54] While Dr. Morris has set out to develop a semiotic which will be equally acceptable to materialists and "mentalists," it is quite evident that his own materialistic philosophy moves him to conceive of behavior as alawys transient and of goals as always extrinsic to the agent. For St. Thomas, on the other hand, immanent "behavior" is a fact, and the goal of such "behavior" is intrinsic. But that there must be some goal or end for both transient and immanent acts is beyond dispute: "Agens autem non movet nisi ex intentione finis. Si enim agens non esset determinatum ad aliquem effectum, non magis ageret hoc quam illud; ad hoc ergo quod determinatum effectum producat necesse est quod determinetur ad aliquid certum, quod habet rationam finis." *Summa Theol.*, I-II, q. 1, a. 2, c.

In short, St. Thomas and Dr. Morris seem to agree almost perfectly in their description of what happens in sign behavior; their disagreement centers about the interpretant. But even here St. Thomas would not, it seems, say Dr. Morris' formulation " of a set of conditions sufficient for something to be a sign " [55] is incorrect; he would, however, say it is not a definition. Dr. Morris, on the other hand, has not proposed his formulation as a definition, but only as a more or less tentative way of delineating some " material object " for semiotic.

Both St. Thomas and Dr. Morris appear to give to language signs a primary place; Dr. Morris, however, while giving special consideration to " language," develops his semiotic in such a fashion as never to exclude non-language signs. Therefore, in the following discussion relative to Dr. Morris' " modes of signifying," it must be kept in mind that what is said of St. Thomas' theory is restricted to language signs; what is said of Dr. Morris' is not so restricted.

Dr. Morris chooses to classify signs " in terms of differences in tendencies to response." [56] Again, this is a behavioristic approach. In the relation of an organism to its environment there are three factors to be taken into consideration: " the nature of the environment in which the organism operates, the import or relevance of this enviroment for the needs of the organism, and the ways in which the organism must act upon the environment in order to satisfy its needs." [57] A particular type of sign signifies each of these facets of the environment: a " designative " sign signifies the nature of the environment; an " appraisive," the relevance of the environment for the needs of the organism; and a " prescriptive " sign, the ways in which the organism must act upon the environment to satisfy its needs. A forth type of sign, the " formative," disposes an organism " to modify in determinate ways the dispositions to response occasioned by other signs. . . ." [58]

None of these signs, however, is useful to an organism in isolation from the rest. For instance, the word " hat " pro-

[55] *Signs, Language and Behavior,* p. 10.
[56] Morris, *op. cit.,* p. 62.
[57] *Ibid.*
[58] *Ibid.,* p. 158.

nounced by itself, though it signifies, will not ordinarily be a useful sign; that is, it is not sufficient to direct behavior. But if the word should be accompanied by pointing, then what is designated by " hat " (" hat " is a " designator ") is signified as being in a certain region of the environment, and the interpreter is so disposed that his behavior can be directed toward it as a goal-object. This complex of signs, the word " hat " plus the gesture of pointing, composes an " ascriptor," in this case a "designative ascriptor." Should this ascriptor be made more complex with the addition of an appraisive sign, e. g., " becoming hat," and should the interpreter be disposed primarily to preferential behavior thereby, the ascriptor becomes an appraisive one. A prescriptive ascriptor would be exemplified in the command or suggestion, " Buy that hat." A fourth type of ascriptor is the " formative," e. g., " Hats are either becoming or not becoming," where what is signified principally is alternativeness or the exclusion of a third possibility. These four types of ascriptors, then, form the basic signs which are useful to an organism. " The notion of ascriptor." Dr. Morris tells us, " corresponds roughly to the term ' sentence.' " [59]

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There are, in this analysis, many similarities to the Thomistic analysis of language signs. First of all, as has been noted above, nouns and verbs, which are the material of *orationes,* do not, if used in isolation, signify in such a way as to satisfy the interpreter; the basic sign which is useful is the " perfect " *oratio,* that complex sign which may express a fact, make a request, issue a command, or ask a question. The " perfect " *oratio* of St. Thomas seems to correspond to a great extent to Dr. Morris' " ascriptor." However, where Dr. Morris distinguishes his ascriptors according to whether they dispose the organism with respect to the nature of the environment, its relevance for the needs of the organism, or the response requirements of the environment, St. Thomas divides his perfect *orationes* according to their usages. A perfect *oratio* which is

[59] *Ibid.,* p. 73.

particularly suited to convey information, or is such that its primary and normal usage is to give knowledge, is an enunciative statement, whether it conveys information about the location of things in the environment, about their usefulness to anyone, or about the actions that must be performed to fulfil some need or desire, or about anything whatsoever.

It is true, however, that *orationes* are made up at least in part of terms which are peculiarly "identificative" (those signifying accidents of time and place), terms which are peculiarly designative (nouns), terms which are peculiarly appraisive (those closely connected with the will or emotions, e. g., "good," "pleasurable"), terms which are peculiarly prescriptive (verbs in the imperative mood), and those which are peculiarly formative (syncategorematic terms). Nevertheless, since St. Thomas approaches the problem already equipped with an Aristotelian division of terms according to the ten categories, there was no reason for his laying down some other criteria for classification. Moreover, a disposition to respond to one's environment is only a consequent of a sign, and not part of its nature. Therefore, a distinction based on such dispositions would be an unscientific, in Aristotle's sense of the term, distinction.

There is in Dr. Morris' treatment of signs something analogous to St. Thomas' division of perfect *orationes;* that is, Dr. Morris distinguishes four primary usages of signs: "Signs . . . may be used to inform the organism about something, to aid it in its preferential selection of objects, to incite response-sequences of some behavior family, and to organize sign-produced behavior (interpretants) into a determinate whole." [60] These distinctions resemble the usages which St. Thomas enumerates: an enunciative statement is one of such a nature that its immediate usage is to give information; the other types of sentences are of such a nature that they are especially suited for directing and ordering others, but always, of course, by making something known, by signifying something to another. A vocative sentence is useful in acquiring another's attention;

[60] *Ibid.*, p. 95.

an interrogative, to direct another to respond verbally; an imperative, to move another to act in a certain way. These types of sentences, St. Thomas says, are within the domain of the rhetorician or poet, for they are especially suited to their intentions of inciting others to certain opinions, likes and dislikes, and to certain ways of acting. They belong, in Dr. Morris' terminology, to a form of discourse other than scientific.[61]

Dr. Morris lists certain subdivisions or specializations of his primary usages of signs, some of which are quite similar to those enumerated by St. Thomas. For instance, Dr. Morris says that one may use a sign " to call out submission in some one else "; [62] for St. Thomas the imperative sentence implies that the interpreter is an inferior; its use would then call out submission in another; Dr. Morris mentions the use of signs " to incite a particular response in oneself "; we have seen already how St. Thomas defends the use of vocal prayer as a means of inciting oneself and others to devotion. Finally, the use of interrogative *orationes* is paralleled by Dr. Morris' statement that one may use a sign " to get a reply to a question which bothers him."

On the very interesting question of the truth of a sign, Dr. Morris requires for the truth of a sign that it denote.[63] For St. Thomas, particular signs which are complex concepts are true when they correspond to reality, which seems to be very much like saying they are true when they denote. Statements are true, as opposed to mendacious, when they correspond to the concept of the one making the statement; which is very much like saying they are true when they denote such a concept. Statements have " logical " truth when they correspond to reality; which is again much like saying they are true when they denote.

For St. Thomas, of course, only enunciative statements signify in such a way that they can be said to be true or false; it makes no difference whether such statements would be

[61] Cf. *ibid.*, Chapter V. [62] *Ibid.*, p. 95. [63] *Ibid.*, p. 197.

classed as designative, appraisive, prescriptive, or formative in Dr. Morris' terminology. While the other types of perfect *orationes* cannot be said to be true or false, they could, with the enunciation, be said to be " adequate or inadequate," as Dr. Morris uses the terms; that is, they can be successful or unsuccessful in accomplishing the sign-producer's purpose of convincing an interpreter or directing his behavior.[64]

Again, however, the effectiveness of a sign is only accidental to it, not something essential; as such, it could not constitute for St. Thomas a scientific criterion for distinction, nor could it even enter into a scientific, in the Aristotelian sense, treatment of signs. Nevertheless, whatever scientific knowledge one might attain about the *nature* of signs is attainable only through logical deductions based on principles resulting from such intelligent observation.

There is still one point of agreement between St. Thomas and Dr. Morris to be brought out, a point on which Dr. Morris will perhaps find very little agreement in current philosophical circles. He states that " semiotic," which includes logic, becomes in its expanded form the essential organon of philosophy." [65] Because for St. Thomas the elements of logic are the simple and complex concepts expressed by terms and propositions, and because such concepts, terms, and propositions are signs, a study of signs is prior in some respect to logic. There is, however, a difficulty connected with this analysis: even a science of semiotic would have to employ logic, and so logic would be prior to semiotic, or at least to that part of semiotic which is not identical with logic.

Despite all the remarkable similarities discovered between St. Thomas' analysis of signs and that of Dr. Morris, there is, of course, no possibility of denying the fundamental philosophical differences of the two men, differences which make necessary a frequent *mutatis mutandis* procedure in reconciling the two analyses. However, St. Thomas was not himself averse to employing such a procedure in order to extract from other

[64] *Ibid.*, pp. 97-106. [65] *Ibid.*, p. 237.

philosophical systems whatever could be usefully incorporated into his own. It is with the hope that modern Thomists may find in Dr. Morris' semiotic a source of useful adaptations that this article is presented, and also with the hope that it may contribute to some degree of mutual understanding between Thomistic and non-Thomistic schools of thought.

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SYMBOLISM AND CAUSALITY

THE rational organization of the world has always involved the notion of causality in some form or another. For the simple observation and collection of detached events would be meaningless and useless without the operation of some principle of order. As the most significant and powerful instrument of order, *causality* is usually defined as that which produces something different from itself. Without discussing here the existence, meaning, types, operation or the value of causality, it suffices to acknowledge that this notion is generally accepted by common sense as well as by reflexive thinking, and that it has played a leading role in the natural sciences from the time of the Greeks to the classical period of modern science. The question to be treated here is whether causality is still relevant in science and more particularly in physical theories.

As physics was mainly *qualitative* in earlier times, the causal language already accepted by common sense was convenient and adequate for natural science as well. In this sense, Aristotle and later St. Thomas [1] maintained that the physicist must use all the causes and especially the final cause in explaining nature. Insofar as *mobile being* is the proper object of physics, the fact that it is a specification of being as such makes it capable of treatment by metaphysical categories as well. That is why the modern scientific thinkers, from Descartes and Newton to Laplace and Herz, remained faithful to the causal language, although their philosophies differed from the Aristotelian tradition.

During the modern period, however, the *quantitative* aspect of physics emerged from the experiments of Galileo with an expanding success, and it lent itself more freely to a symbolic instead of to a verbal expression. At the same time, the subtle

[1] St. Thomas, *I Physic.*, lect. 1, and *I Metaphys.*, lect. 1 (513b) and lect. 2 (518b).

analysis of the conditions and limits of knowledge, as well as of the strict and sufficient requirements of experimentation and generalization, led some philosophers to discard the notion of causality as a real and necessary principle. For Hume, a cause as such is never observable or perceivable; consequently, it has no objective existence. Causality thus shrinks into a mere habit and can be replaced more conveniently and effectively by linguistic or mathematical structures displaying the constant and necessary connections which prove sufficient to science.

There is something uncanny about the finality with which Hume's analysis and conclusions have been accepted by scientists. But if one disagrees with his rudimentary epistemology, which confuses impressions and ideas, then his comments on causality do not make sense any more. The mind can certainly see or intuit the constant and necessary connections between given sets of objects or events. It also names and uses such connections in analyzing and systematizing knowledge. But it cannot be responsible for all the events themselves, for their actual contacts, for their results, and for their constant recurrence. For if it were, there could be no decisive distinction between objective changes and dreams or subjective constructions. And if it is not, then nothing can explain how the mind recognizes recurrences, how it interprets its perceptions, and why there is such a close parallelism between external events and our mental construction of them. Furthermore, it is unnecessary to observe a thing in order to assert its existence: atoms, electrons and protons are considered as objective without ever being observed as objects. Likewise, if some events are observable by external inspection or reflexive introspection, yet the details of their becoming or their continuity are never completely observable: yet, we accept these notions as a whole, as they help to assume or assert constant and necessary connections between events or objects. For there are no absolutely independent occurrences in the world, and no absolute discontinuity between any phenomena.

Because of these intimate binding connections between events, scientific words are relatively static. And they have to

be in this world of flux, in order to fix meanings and uses in statements concerning the present and the future. In short, they are universals; and as such they should not be identified with the things in particular, but with the things *in action* which is another way of saying with their meaning. The notion of *operation* and the notion of *value* are involved in this remark. The first is largely physical, insofar as it deals with the circumstances, conditions, modes, manner and behavior of a thing in action. The second is strictly philosophical, for it refers to the specific or general importance of a thing in action situated in the comprehensive field of the whole creation. With the use of the notion of operation only, knowledge is simply practical. But with the twin use of operation and value, knowledge becomes complete.

The question now is whether causality, which is prominent in ordinary language (level I) and in an axiological language (level III) is also necessary in an operational language (level II) which covers the needs of a physical system. To this question, modern thinkers answer in the negative generally. The wealth of scientific knowledge gathered from the Renaissance to the present day led some of the finest minds of that long period to devote their labors and thoughts to the operational aspect of the study of nature. Scientific discoveries and physical theories were organized through a succession of operations involving: (1) the planned arrangement of a set of objects in given circumstances, (2) the occurrence of certain contacts between natural events and technical objects, (3) the observation of resulting events and circumstances different from the original ones, (4) the recognition of likenesses in repeated similar operations, allowing for proper generalization and prediction, (5) the expression of these observations and relationships by means of symbols properly integrated in a mathematical language.

As long as mathematical structures with solutions usually monovalent could account for the restricted data which formed the material of classical physics, the circumstances and contacts contributing to the production of results were considered as the

causes of these results. But with the complex expansion of our technical observations and experiments, new mathematical structures involving approximations or plurivalent solutions had to be used. The apparent uncertainty introduced into the exposition and interpretation of scientific theories gradually displaced the causal language formerly current: for it seems that causality is less immediate or observable in the equations of Relativity and Quantum Physics.

The thorough integration of modern physics into its system of expression thus accounts for the tendency to consider science as a copy of the external world, and even for the rival theory that the external world is actually organized by the activism involved in scientific progress. But as no room was found for the traditional notion of causality in the organization and practical interpretation of the latest physical theories, the causal language was neglected or formally abandoned. Whether a physical system is a copy of the external world or the producer or organizer of our experience, it was thought unscientific in both cases to introduce into it any ingredients, such as causal elements, which seem to be neither observable, nor verifiable, nor indispensable in the production and the expression or presentation of that particular physical theory. And once causality was formally eliminated from the realm of natural knowledge, many thinkers found it proper and urgent to eliminate it as well for the higher realm of interpretation, of value, of metaphysics, of philosophy as a whole.

Our burden now is to show that causality is unavoidably relevant in physics; and that it is materially implied in a physical theory, even if it not formally involved in its language and symbolism. Such a discussion would then strengthen our conclusion that the causal language reappears in the interpretation of physical situations, methods, results and systems; and consequently, that causality always keeps its place in philosophy proper. The argument may be developed through the analysis of the use of symbolism in physics.

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Three types of symbols are involved in the organization and presentation of a physical theory: (1) the *abbreviative symbols* which stand for physical concepts such as energy, acceleration, time or mass; (2) the *quantitative symbols* which represent mathematical values such as positions or numbers; (3) the *operational symbols* which indicate types of relations, such as functions, equations or variations, as well as calculating processes, such as addition, summation or integration.

Symbols are usually assigned to basic facts and relations: they substitute for whole series of actions performed or expected to be performed by given physical objects and leading to measurement. The choice and the economy of a symbol are influenced by the physical circumstances of the experiment in view and the features of the system into which it is integrated. Symbols are usually assigned to objects and actions in general, and rarely to individual instances. But as it is impossible to meet or to establish absolutely identical conditions in organizing a type-experiment, the symbolism of approximation and probability is now used to cover the slightest differences or variations expected.

The methodical steps to be followed in harnessing an experiment with a mathematical structure are these: (1) devise carefully the objects and circumstances of the experiment and give values to them by calculation; (2) note carefully the subsidiary conditions of the experiment, such as time, positions, temperature, proximate bodies, and so on; (3) assign proper symbols to basic objects and relations, binding them in an equation which may be taken as the working hypothesis of the experiment; (4) from this equation deduce another representing the momentary rate of change of the variables investigated; (5) integrate this equation to reproduce the working hypothesis in a mathematical form suitable for calculation and verification. It is this function which represents a physical law, insofar as it describes *in action* the general relations of the elements involved and allows the prediction of similar events. The simplicity of its expression, which is an additional criterion of its effectiveness and correctness, screens the complex conditions

of its actual operation as shown by the lengthy calculations involved in the process of its solution.

These circumstances are illustrated by any mathematical expression of a physical law in classical or in modern physics. No causal language is used in setting or in manipulating such mathematical expressions, for the simple reason that the major intention of the physicist is to discover and to state the *quantitative relations* of the basic elements represented in the expression: he is not concerned as such with the explanation of the phenomena involved. Yet causality is involved in the relations between the phenomena symbolized: for the factual symbolism which represents them and their quantitative relations is itself conditioned by these relations which have to be explained eventually outside of the symbolic language. In other words, symbolism never determines any phenomena, but only certain mathematical expressions which may or may not correspond to expected phenomena. The occurrence of any phenomenon is conditioned by other phenomena; and the factual relation between them is eminently causal and not mathematical. For it is only something concrete like matter or energy, which can produce a concrete phenomenon: symbolism belongs to a different level of existence and has no power as such to produce anything in the concrete or phenomenal realm. The name of *cause* is precisely given to what which produces something different from itself in the same level of existence, and that is why the reading of a coherent sequence of mathematical expressions does not require the causal language, which is indispensable in explaining the actual succession of natural phenomena.

The operation of causality in a mathematical system appears in the concomitant variations of two sets of phenomena under investigation. The variation of the first set cannot be due to an arbitrary mathematical change, but to the deliberate activity of the physicist who interferes by *concrete means* with the original circumstances of a phenomenon or experiment. This motivated interference is expressed by a change in the original expression of the given relations of the elements of the phe-

nomenon or experiment. Strictly mathematical operations *indicate* afterwards a corresponding variation in the second set under investigation. But this mathematical variation has to be *tested* by concrete means in order to find out whether the extra-mathematical manipulation of the original circumstances is justified or not. It follows that the variation of the second set of phenomena is *caused* by the variation of the first set: it is neither determined nor caused by the variations of their symbolic expressions, which are *expressions* of certain modalities of concrete events and not the events themselves. The constant correspondence of the variations in the related mathematical expressions merely *represent* an intimate and objective quantitative relation between the set of phenomena under investigation.

Causality appears in another way in a physical theory, namely, in the ordinary language used to state its original assumptions and to link up eventually certain steps in the succession of its mathematical development. If symbolism alone could explain by itself the happenings in a physical system, no words of any kind would have to be used in expressing the behavior and relations of the elements involved. But this is impossible: because symbols stand for something which gives them meaning and power, for they have none by themselves. The mathematical relations between the things which stand behind the symbols are only one aspect of the manifold properties of these things: as their symbolic expression is conditioned by these things as a whole, it stands to reason that ordinary language has to be used in order to introduce and interpret the symbols. Now, ordinary language covers more qualitative relations than symbols can ever do: it is that additional intension which involves causality, which allows both the factual contacts and the necessary connections between phenomena, and which imputes meaning and operational power to the symbols chosen or used in a physical theory.

To be sure, a system of mathematical physics is something more than points, measurements, number, operators and symbols. It requires the silent presence of the phenomena (and

substances) which give meaning to the whole symbolism and which allow both the translation of its final mathematical expressions into ordinary (or scientific) language, and the utilization of these expressions with their meanings for the higher interpretation of the whole systems in terms of ultimate categories and principles. For lack of a better word suitable to an idealistic attitude of mind, Eddington calls that " something more " beyond the symbolism the " stuff-out-there," an expression which pegs the whole symbolism of a physical theory to the realities he has to acknowledge but does not need in the development of its mathematical expression. With this summary dismissal of the ontological elements of the external world the field seems clear for a mathematical organization of the universe, where the mind reigns supreme and strains itself to do the work which is factually done by the objects it proudly tries to eliminate. But in this ethereal realm of almost pure ideas, should not one say that the mind *causes* the mathemathical fastened on the pointers, measurements, numbers, operators and symbols in general used in the physical theory they illustrate? The fact is that whenever we cogitate outside the technical field of the mathematical structues of a physical system, the language of causality reappears in one form or another. So that causality is required both in the final shaping of a physical theory and in its ultimate interpretation in terms of values and general principles.

The construction of physical theory involves a number of steps where symbols play a part subordinate to ordinary (or scientific) language. Such is the case in (1) the generalization from single experiments to a physical law expressed in words or symbols; (2) the framing of an hypothesis; (3) the precise definition of the basic concepts involved; (4) the organization of a theory, where groups of laws connecting fundamental concepts are related by a combination of words and mathematical expressions; (5) the verification of the actual relation between a law and the relevant theory; (6) the determination of the proper criteria for the success of the physical theory; (7) the choice of the mathematical structures most efficient

in representing and developing the characters and objectives of the given theory; (8) the linguistic expression of the *qualitative relations* (or laws) involved in a general theory, and (9) the connection of the qualitative laws with the mathematical expressions of the theory proper. The subordination of symbolism to language in all these processes points to the open or hidden operation of causality in the phenomenal world which a physical theory endeavors to harness, to describe, to utilize and to investigate for further developments.

As regards the ultimate interpretation of a physical theory, the mental operations involved in this process cannot be described fundamentally by symbols alone, whether mathematical or logical. For the interest of this activity does not reside in the formalism of the operations, but in their content proper which is phenomenal or ontological even though it may be expressed partly or even principally by means of symbols. The conditions usually required for such an interpretation are the precise knowledge of the elements, assumptions, methods and conclusions of the various physical theories; and the mental analysis of the procedures and successive phases of a theory with regard to its coherence, conclusiveness and relevancy.

The interpretation proper of the theory as a whole, in terms of knowledge and reality in their objective and universal aspect, involves such questions as the following: the nature and operation of the basic concepts of Space, Time, Motion and the like; the individuality and interdependence of phenomena; the abstract and actual relationship between the continuous and the discrete; determinism and arbitrariness in the processes of nature; the rational and empirical elements of mathematics; discursive, demonstrative and intuitive activity in relation to the construction of a physical theory; real unity and internal finality of such a system; perfectibility of a construction through changing models, with the correlative principle of reaching truth by successive approximations; the relation between knowledge and reality; whether and why nature (or the stuff-out-there) offers any resistance to our mental structures and physical hypotheses; how and why expectations based on

probabilistic structure may lead to legitimate predictions; the reason for the obvious distinction between the phenomena of physics and those of biology and sociology, as well as the details of their specific activity and the eventual formalization of their processes; whether the conditions of the actual process of discovery involve a combination of experience, theory, intuition, reason and chance; and the value of science in general.

All these problems entail more strictly the subordination of symbolism to language, than does the construction of a physical theory which already involves such a subordination. Yet, if the ultimate interpretation of a natural system goes beyond the level of its construction, there is no abyss or irrelevance between the span of its construction and the field of its interpretation. As a significant and useful part of knowledge, science integrates itself naturally into the specific interests of philosophy; for it constitutes a justification of both its prolegomena and the basis of its higher-level conclusions.

This brings us back to our original question: whether causality is necessary in the operational language convering the needs of a physical system, as it is in the ordinary language of everyday experience and in the axiological language of philosophy. The development of our discussion leads us to assert emphatically that the factual continuity underlying these three levels of mental activity (ordinary, scientific and philosophical) carries the necessity of causality into the intimate pattern and web of a physical theory. For the causal relation is a constituent element of the realm of existence in and through all its levels.

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Illustrations of our general conclusion about the necessary presence of causality in a physical theory may be taken from classical, statistical and modern physics. The monovalent solutions of classical physics may be interpreted easily in terms of causal relations. As an example from statistical physics, we may interpret Dirac's formula:

$$S^{-1}(x, y, z, En, k, m)\, S(x, y, z, En, k, m)\, dxdydz.$$

This matrix expression indicates the probability that an electron with an energy E will be found in a volume $dxdydz$ at the point with x, y, z as coordinates and at a given instant. The small quantitative differences involved in this probability expression, in fact or by indirection, do not result from an arbitrary decision of the mathematician or from the inescapable implications of its mathematical structure. This matrix pictures mathematically a situation which is caused concretely by sets of events which can be expected to produce a certain result concerning the electron under consideration. The behavior of that particular electron is an occurrence which must have a cause, even if its operation cannot be calculated with accuracy. The probability expression indicates the difficulty of obtaining a strict numerical value for the position of the electron, and not the non-existence of a cause to the factual behavior of that electron.

Similarly, the scatter of an indefinite set of electrons may be described collectively though not individually: but if it is not possible to determine accurately the path or position of an individual electron of that set, it does not follow that they do not occur and that their occurrence is not conditioned necessarily by the factual operation of other events. The causal language can be formally introduced in statistical physics, if complete situations could be observed and expressed in their factual details. At present, it is not practical to do so, because science can observe only restricted occurrences and sequences of events, rather than complete situations.

As a last example from modern physics, we propose to analyze the so-called *Uncertainty Relations* of Heisenberg, where it seems more difficult to detect the operation of causality. In order to place them in their mathematical and physical background, we might be permitted to restate some technical preliminaries.

As it is well-known, a magnitude represented by one number in classical mechanics may be represented either by one number or usually by a matrix in Quantum physics. When the matrix is not diagonal (with the elements in the diagonal row alike),

it is impossible to calculate the precise values of the given magnitude, which is then specified by approximation only. If the original matrix can be changed into a diagonal one by means of an orthogonal transformation, the diagonal elements of the new matrix give the precise values of the magnitude under consideration. The importance of diagonal matrices in physics may be stressed by the following analogy: the physical representation of a non-diagonal matrix resembles the blurred image given by an improperly focussed binocular; while the diagonal matrix corresponds to the perfectly clear image given by a binocular properly focussed and adjusted to the eyes and to the object investigated. The orthogonal transformation then corresponds to the operation of adjusting the binocular until it gives a clear picture.

Let us now take the two matrices Q and P having $(q1, q2, q3 \ldots qn)$ and $(p1, p2, p3 \ldots pn)$ as diagonal terms respectively, when these matrices are made diagonal. If Q and P are commutative, they can be made diagonal simultaneously by an appropriate rotation of the axes; with this done, the values of the elements q and p of the matrices may be obtained at the same time. But if Q and P are non-commutative, only one at a time can be transformed into a diagonal matrix: in this case, if Q is made diagonal, its elements q will have precise values, while the values of the elements p will remain uncertain. The possibility of obtaining the precise values of two physical magnitudes simultaneously depends then on the commutativity of their matrices. Nevertheless, the possible values of the elements of one matrix may be determined by probabilities when the precise values of the elements of the other matrix are known. Thus by applying the orthogonal transformation S to the matrices Q and P with $S(qm, pn)$ as the terms of this transformation matrix, we obtain

$$S^{-1}(qm, pn)\, S(qm, pn)$$

as the probability that the physical magnitude Q will have the value qm when the magnitude P will have the value pn and reciprocally.

These developments may be applied to a material point in motion having the coordinates $(q1, q2, q3)$ and $(p1, p2, p3)$ for its position and its moment respectively. These six values cannot be determined precisely and simultaneously, on the strength of our previous remarks. To simplify the issue, let us take a system with a degree of freedom allowing only one coordinate q and p for the given position and moment respectively. The general term of the transformation matrix S which changes the matrices Q and P into diagonals is given by the following equation involving h, the Planck's constant:

$$S(q, p) = (1/\sqrt{h})\, e^{2\pi i/h(q,p)}.$$

This expression allows the determination of the probability for the value of p the moment when q is the value of the position. It turns out in symbols that

$$S^{-1}(q, p)\, S(q, p) \text{ may be } 1/h.$$

As the value $1/h$ is constant, the moment can take any value when the position is known, and reciprocally. But if the position is not known exactly and if Δq is the probable error of its determination, the value of the moment p is not totally indefinite. In fact, calculation shows that taking Δp as the probable error in determining the moment, the two errors are connected by the expression

$$\Delta q \cdot \Delta p \geqq h/4\pi. \qquad \text{(A)}$$

Furthermore, the probable error affecting the calculation of the time and the energy of a system is tied down by the equation

$$\Delta t \cdot \Delta E \geqq h/4\pi. \qquad \text{(B)}$$

These expressions (A) and (B) are the *Uncertainty Relations* of Heisenberg which have been the subject of some extravagant metaphysical speculations. But their significance becomes clear and proper when interpreted in terms of causality.

Obviously Heisenberg's expressions result from the practical relations between an observer and the thing observed at the

microscopic level. The reciprocal action of these two terms is negligible in classical physics, where the experimental and probability methods available reduce conveniently the margin of error in the calculation of this interaction. But in microphysics, the effect of the two terms on one another produces enormous and often uncontrollable changes in the observed system. To be sure, the use of light and optical instruments affect the behavior of an electron; for the inevitable clash of a proton with an electron produces a mechanical effect which changes somehow the direction and the timing of both, as Compton has shown. It seems impossible then for an observer to determine exactly and simultaneously the behavior of these two observables. The precision of the measurement of one of them entails a proportional error in the measurement of the other. But the factual difficulty does not justify the assertion made by idealists and pragmatists that indeterminism characterizes what they call nature, and that causality becomes a fiction as a consequence. The fallacy of *non-sequitur* usually characterizes their arguments. Thus Eddington declares that the impossibility of determining simultaneously the position and the moment of a moving particle proves that these two observables are not associated in nature; and that since the physical world does not manifest or require any causal relations, science should remove its opposition to free-will. But if science has no means actually of discovering the precise causal relation between two observables associated factually in experience, it does not follow that causality as such does not operate in nature.

The principle of causality asserts in general that every event has a sufficient cause, and conversely, that there is no effect without a cause. The *practical* impossibility of discovering all the causal relations in a system does not entail the *theoretical* or *real* impossibility of such a discovery. In this respect, Quantum physics as well as any other physical theory uses physical causality continually: it predicts future events by utilizing similar circumstances in the occurrence of similar events; it retraces the causal relations which produce an unpredictable event *after* its occurrence; and it justifies the practi-

cal impossibility of certain calculations and the subsequent unpredictability of certain events by means of the causal relations binding together the observer, the event and the circumstances of their mutual reactions.

The probability expressions used by Quantum physics should not be taken as an indication of the primacy of chance and indeterminacy in the operations of nature. For indeed a mathematical probability is expressed by a quotient which entails a determinate value: but the alternatives involved in the representation of this value do not form an infinite class corresponding to the acknowledgment of pure chance, which would be the negation of all science. These alternatives are reduced always to a limited set, in keeping with the regular operations of nature, by means of restrictive principles involving causality, such as the conservation of energy, the equality of action and reaction, and the steady value of Planck's constant which corresponds somehow to some hidden causation in the operations of nature. This remark has its parallel in the logical form which may be given to a probability expression. While classical physics expresses its statements in categorical form usually, Quantum physics favors more the disjunctive form. The classical assertion "*A* is necessarily followed by *B*" becomes the Quantum statement "*A* is necessarily followed by *B* or *C*." Both expressions involve causality; for in order to deny a causal relation by means of a disjunctive, we should have "*A* is not necessarily followed by *B* but indeed by *C*, *D*, *E* or *F* and so on indefinitely." But no physical law could be expressed in this way, for such an indefinite disjunctive covers only individual cases produced by blind chance. The restriction of the formal alternatives symbolizes the restriction of the physical alternatives indicating what we may call the *causal resistance* of the operations of nature.

It is true that probability expressions and disjunctive forms seem to weaken the full impact of a causal operation; but they neither eliminate it nor do they try to dispense with it: causality affects in fact the correct alternative, even if we cannot always put our finger on it, and somehow diffuses its shadow on the

others in order to bind them in the proper probability forms and expressions. In the same way, the very limits imposed on the *Uncertainty Relations* by Planck's constant and by the intimate connection between the pair of variables eliminate the freedom of the mind in their expression and even the random choice of mathematical forms for their expression, and point to some hidden necessity in their formulation. In this line of thought, one may ask whether the relative weakening of the classical interpretation of physical causality though the new discoveries of science and the probability structures used for their expression points to a universal physical causality which might be caught one day by more subtle experiments and by more adequate mathematical forms. A similar view was expressed by Planck himself when he attempted to integrate the new physics in the wider field of human knowledge as a whole.

This legitimate question mark summarizes the teleological and justifies in a way the successive phases exhibited by physical knowledge in their development. The organization of our physical knowledge thus begins with *substance-signs* coordinated largely by causal relations expressed by symbols eventually. As these relations are investigated with greater precision and detail, a more flexible symbolism is invented to weave and hold together the new facts and the new connections discovered. At this stage, the substance-signs gradually disappear in favor of the operational symbols integrated into an effective mathematical structure: here, the earnest physicist becomes interested in the permanence and invariance of the relations between the symbols and in their effective mathematical expression, rather than in the individual substances or phenomena and in their causal relations. But as the operational symbols are constructions of the mind, new and more general sets of symbols are constructed and investigated to cover new experiments and new facts involving that same invariance and permanence, if the previous mathematical structure prove inadequate to the task. The success of these efforts, which technicians apply to practical needs, has wrongly increased

the momentum of the arguments against the operation and existence of causality in the realm of science and nature.

Assuredly the burden and the enjoyment of the physicist at this level of expert activity coincide with the actual and technical processes of the construction, the expression and the verification of a theory, regardless of its epistemological prolegomena, its ontological implications and its axiological conclusions. Insofar as present-day physics does not deal with the causal relations between substances, the weight of symbolism exceeds by far the weight of causality in a modern physical theory. For this reason, the expert investigator neglects causality altogether and turns exclusively and formally to the coherence and unity of his mathematical structures, which express and generalize the invariant or permanent relations between natural phenomena, when asked for an explanation or an interpretation of his results. Even causal laws are expressed as theorems in these mathematical structures; and in due course the general invariant relations expressed symbolically are considered as natural laws grouped together systematically in a physical theory. But though physics as such need not be interested in the philosophy which underlies and which crowns the interpretation as well as the construction of a physical theory, this legitimate indifference does not eliminate the facts, the categories, the principles and the values of that philosophy which has also a legitimate and a necessary place in the pyramid of knowledge.

The real question with which modern physics faces us now is not whether or not causality actually operates in the physical world, but how to express in a satisfactory manner for the modern mind the proper relations between physics and philosophy. A sound solution of this question would show the fundamental and teleological compatibility of the attitude of Aristotle and St. Thomas, for whom the physicist uses all the causes in order to understand the substances he investigates, and the practical attitude of the modern physicist whose more modest objective is to discover and describe the behavior of the secondary qualities as well as the primary qualities of the

physical world, without having to lean on ontological investigations and statements, even though they are prerequisites of his explorations and results.

For in the long run, both the Aristotelian philosopher and the mathematical physicist will agree that we are not completely free to organize our knowledge of the natural world: the frame of science is conditioned by objective data which resist arbitrary manipulations and which shatter any narrow or improper mathematical structures imposed on them. Here we have the basic explanation of the periodical development of physical theories. To be sure, the human mind is unable by its very essence to penetrate the intimate nature of matter, which is intimately related to the external world, to the succession of phenomena, to our sensations and perceptions, and even to our thinking generally. As principle of individuation, matter has no idea we could grasp: [2] it becomes intelligible to us by conjunction with a form which changes it into an essence. Thus informed, matter can become the other in the process of knowledge; but it realizes this aptitude *in sensu diviso* by ceasing to be itself. Our mind can therefore grasp an embodiment and a succession of forms, and it is capable of connecting them systematically and of expressing their relations in particular or in general statements; but it is unable to exhaust all the forms, as it is finite and it moves in time. Here again, we can see why no physical theory will ever be able to account for the totality of actual and possible phenomena or to pronounce the last word on the nature of the external world.

On the other hand, our means of knowledge are essentially imperfect: our senses, our reason, our intuition often mislead us. Organized science is a blurred image of pure intellection: for the proper mode of human knowledge is not *in aliquo* as with the angels, but *ex aliquo* in a discursive manner.[3] It is true that reasoning unifies after distinguishing; but this process of reducing multiple elements to an abstract principle characterizes the inferiority of reason. A series of judgments form-

[2] *De Veritate*, q. 3, a. 5.
[3] *Ibid.*, q. 8, a. 15, and *I Poster.*, lect. 32 and 35.

ing a well-ordered chain would never cover adequately the fundamental unity of nature. Furthermore, discursive thought progresses by substitution of equivalents, although there are no real equivalents in nature. If our knowledge of the external world has thus the weakness of discursive thought, yet it shares in its triumphs with each discovery and each successful systematization of our expanding acquisitions.

Modern physics approximates and expresses the operations of nature by means of complex symbolic constructions. But its symbolism is neither arbitrary nor exclusively subjective. Its power and its objectivity have their foundation in the operation of the causes which bind the mind with the external world. Thus from the highest reaches of reflexive thinking where it is formally accepted, causality drenches the external world and gives to the whole field of physics its factual significance, its practical value, and its justification for true progress.

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BOOK REVIEWS

Royce on the Human Self. By J. Harry Cotton. Cambridge: Harvard University Press, 1954. Pp. 359 with index. $5.00.

There is a challenge hard to resist in a philosophy which claims that our present ideas have a meaning that is infinite. And that challenge becomes more insistent when the same philosophy further teaches that we human selves are in truth finite fragments constitutive of an infinite absolute self. Such is the philosophy of Josiah Royce who during his thirty-four years at Harvard University developed and taught a unique system of absolute idealism. This is the philosophy which J. Harry Cotton presents with admirable clarity in *Royce on the Human Self.* The human self is a point of departure for the author, an approach to the whole organized system of thought seen in Royce's writings. It is a well-chosen point of approach for two reasons: Royce himself, particularly in later years, was deeply interested in the problem of the individual self in relation to the whole world, the absolute, which he called the Self of many selves. His inclination to practical social and religious applications of his doctrine revealed the very definite need of a clear and certain teaching on the nature and value of the human self. For reasons of criticism, too, this initial concentration on the self has an advantage, for it is in his attempt to save the finite self from being absorbed in the unity of the Absolute that Royce comes face to face with the most radical difficulty against his system as a whole.

The search for the precise significance of the self is not an easy one. Royce, rejecting previous speculation on the matter, sees a key to the problem in an empirical examination and appraisal of the present moment of consciousness: What is given here and now? The self is not a pure datum; it is not to be found as known in my experience in the same way that other things are known. Nevertheless, it is in some obscure way known as the thinker of the present moment. Following this line of investigation, Royce continues his analysis of present cognition. In the present thought itself, he says, there is evidenced a will or purpose which reaches out, as it were, to embrace all the concrete experience that is signified or meant by this idea. (E. g., the idea of counting is partially satisfied with the limited series of numbers now experienced, but the will of the idea reaches beyond to all countable numbers.) The limitation of our present consciousness is but the failure of the present idea to attain to a perfect fulfilment of its will, which is to say that the present ideal purpose is only partially embodied by the data of my actual experience.

This imperfect fulfilment or embodiment of the idea's purpose is called the internal meaning of the idea. Now there is joined to the present partially fulfilled ideal volition a ". . . certain peculiar feeling of interest," and this constitutes, for Royce, the finite human self. We have here, of course, only an initial characterization which needs development. And the first direction of development which Cotton explains in his work regards the time element always associated with the individual self. If the self is so constrained to the present moment, what account can be made of the consciousness of the past and future? Royce appeals once more to the double aspect of our ideas: the purpose and the fulfilment. There is more of meaning than of knowledge in our ideas, more purpose than fulfilment. Beyond the present experience the ideal volition reaches out in external meaning to all that is not now present—to the acknowledgment of the past and anticipation of the future. In this temporal extension the self is seen in further definition as the constructor of both the past and the future. Royce once wrote that the present moment is the builder of both branches of the conceived time stream. The present datum, then, has the nature of a sign whose interpretation is a kind of active mental interference in which the human self is seen to postulate both past and future dimensions.

Further definition of the self comes to us through social communication. Self-consciousness results from a whole complexus of elements, but primarily it comes from the vital contact that the self experiences in human relations. It is by talking with and knowing my fellow-man, by knowing what his thoughts are, by communicating with him and comparing ideas that I become most self-conscious. Through such social relations and intercommunications, too, the self is put into contact with the physical world of nature—the common property of all the distinct regions of peculiar interest and communication, the common property of all selves.

Royce now formulates a complete idealistic ontology by enlarging on what is perhaps the most characteristic note of his doctrine: thought is activity. There is no pure speculation; thought is practical; it is volitive. Deeds are called brilliantly clear expressions of longing. Even now that extent of will which is unfulfilled for me, which is beyond my self, which is beyond my " world of appreciation," projects into my consciousness something of another world, the " world of description." This is a transcendent world of fulfilment and experience which the finite idea-self means but cannot know. This meaning, empty of experience, is signified in me by symbols of mental constructs just as past and future were constructed. But what is an unexperienced " world of description " for me is, nonetheless, a " world of appreciation " and internal experiential meaning beyond me. Hence Royce's notion of Being: " What is, or what is real, is as such the complete embodiment, in individual form and in final fulfilment, of the internal meaning of finite ideas." Reality, the Absolute—what is later

termed the Community—is the determinate summation of all internal meanings. The whole of reality is the community of all finite selves, the infinite Self of many selves. The infinite purpose of our finite ideas when considered as infinitely embodied in experience is the Absolute plenum which we mean in full but know only in part. And this Absolute is at once a community, divine and personal.

From an analysis—his own peculiar analysis, to be sure—of the moments of volitive cognition Royce comes to his understanding of what a human self is and at the same time finds a basis for his ontology. Unfortunately, however, very serious difficulties arise: How can the infinite be "constituted" by the summation of finite internal meanings, finite selves? What is it that constrains attention in us and so limits our thought to finite fulfilment? And conversely, what systematic reason can Royce give to explain why the Absolute—the larger Self—does not indeed swallow the finite self and destroy its individuality and freedom? It is the ancient problem of the one and many, of monism wanting to be pluralism and vice versa. Royce saw the problem as one to be solved in a study of logical theory and the mathematical analogy of the infinite self-representative series. In this direction he sought to show how an infinite multitude of finite selves could be at once presented as constitutive of the Absolute and still maintain their selfhood. Against Bradley, Royce defended the *totum-simul* presentation or completion of an infinite series of finite selves each of which stood apart as more than mere appearance and as resisting "transmutation" in the Absolute. But to face a problem is not to solve it, and this writer adopts the criticism of George Santayana to the effect that though Royce liked to give to his system the name of absolute idealism, he constantly strove to fuse with this idealism the radically incompatible element of social realism.

There is often in Royce's social writings a very appealing evidence of zeal for peace and the welfare of all. Salvation, peace, full self-realization can come only through the virtue of loyalty exercised in the absolute community. Loyalty is all-embracive, ". . . free and practical and thoroughgoing devotion of a person to a cause." By loyalty I exercise my freedom in the consciousness that I am at once myself and part of a larger Self. When loyalty reigns, all finite persons freely unite with one another to constitute the whole wherein each individual lives more intensely in his devotion to the Community. But whatever the charm of expression or sincerity of intention in these writings, one cannot escape the inner conflict between the absorption of the individual selves which seems the inevitable consequence of his theory and the permanence and freedom of individuals which is dictated by his own practical interests.

Royce's treatment of the Christian Church has been justly criticised. His notion of Christianity was based on a very inadequate study of a few chapters of the New Testament, principally Saint Paul. Furthermore, it

does seem that he uses the Church only insofar as he can see in it an illustration of his doctrine. Though Cotton thinks this a less well justified criticism, it remains true that once the Church has been translated into Roycean terms, it is more a Roycean church than a Christian Church, especially in view of the fact that the philosopher quite frankly decides that the Church is better understood if consideration of its Founder is omitted. To this we agree if one has in mind the forced and false imposition on history of a preconceived Roycean religious society. But if one is genuinely interested in the Church of Christ, one must study the entire historical record without prejudice. In Royce there was prejudice in favor of his system, a prejudice which prohibited him from any valid and real recognition of society as history and common experience show it to be. Again some words of Santayana come to mind telling us that when Royce was speaking one had the impression that he could have answered any question asked of him—if he had not a system to defend.

The idealism of Josiah Royce is receiving more and more attentive study as the years go on. J. Harry Cotton's work is without doubt a most valuable contribution to that study. It is a clear exposition of Roycean doctrine enhanced by frequent and apt citations from the philosopher's writings, some being taken from unpublished manuscripts. In the preface the author expresses the hope that his critical remarks will not obstruct the course of the argument. They do not. Rather, we were disappointed that there was not more discussion of a critical nature. If there is a revival today of Royce's thinking in the practical problems of society and religion, we should attend to the metaphysics which is the support and foundation of that thinking. In any philosophy the value of applications is, of course, measured by the validity of underlying principles. The validity of Royce's principles must even now be vigorously examined, tested, judged. There are serious questions of metaphysics which Royce has not answered; there are grave objections which he has not satisfied. Until all difficulties of principle are faced and satisfactorily solved, the practical teachings and consequent applications of Roycean theory are formally unacceptable. Mr. Cotton's primary objective, however, was exposition rather than criticism and in this he has been highly successful. The work treats all the main features of Royce's thought. The presentation is well planned and vivid in expression, the work of a competent scholar. The book is well deserving of the following recommendation given it by Professor William Ernest Hocking: "To deal with Royce's doctrine systematically requires courage as well as competence: Professor Cotton has both. Royce's views on the human self involve his whole corpus of thought, as this work at once recognizes: it thus becomes the first full-length study of Royce's philosophy in English."

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Dialectique de L'Agir. By André Marc, S. J. Lyons: E. Vitte, 1954. Pp. 588 wih index. Fr. 2.400.

Those who are acquainted with the other works of Fr. Marc will welcome this third volume of the series which began with *Psychologie Réflexive*, and *Dialectique de L'Affirmation.* The present volume treats of the moral life, and follows the study of man and his activity, and the examination of epistemology and metaphysics contained in the other volumes. The conclusion of the series is to appear under the title: *L'Etre et L'Esprit.* This work on ethics deserves careful study and serious thought from all who are sincerely interested in the problems of human life and moral behavior. The author has brought to his task, as to the preceding ones, a vast and penetrating knowledge of not only Scholastic thought but also that of other philosophies, of Kant and Hegel, and above all of French philosophy, both " classical " and modern. He has devoted to this series almost thirty years of study and reflection.

The author's analytical powers are displayed in the dialectic carried on between these different systems on all points of major philosophic interest. While some may feel that this process is unconvincing and lacks scientific precision, it does have real advantages. The Thomistic position appears in a much more telling light by virtue of the contrast of opinions; its truth can be much more clearly seen and more profoundly appreciated by making its merit stand out in this way. The richness and " virtuality " of Thomistic doctrine, much of which is lost to those unaware of other systems, is shown in a new light. Not the least virtue of this method is that the reader, who is used to the cavalier treatment meted out to non-scholastics in most history of philosophy courses in Catholic schools and in many manuals will be pleased to see that such serious thinkers as Kant, Fichte, Hegel, Bergson, Le Senne, Hamelin and others are treated as such, and not as misguided, immature dabblers in the world of thought. This last point alone is sufficient to recommend the reading of Marc to the student of scholastic philosophy, for it will help him to realize the need of intelligent, not to say courteous, consideration for other philosophers, and will show the advantages for the causes of scholasticism and truth which are to be gained by a knowledge of these philosophers. Perhaps one of the reasons for the lack of influence of scholastic thought on non-Catholic circles is due precisely to the scholastics' lack of knowledge of other systems and an inability to present their position in terms and in a manner acceptable to and understandable by the modern thinkers.

The synthetic presentations of Thomistic teaching with which Marc concludes his various " conversations " with other philosophers are generally very well done, and stress the fundamental principles and their rich meaning in a way which few modern Thomists can equal. Marc himself is not quite the equal of Père Sertillanges, but there are times when he succeeds

as well. The arrangement and style of the volume are such as not to allow any full, detailed discussion of each point that some may expect, but what is gained is a firmer, more coherent insight into principles. The mere fact of treating philosophical questions as problems to be settled, and of working towards their solution in the dialectical process gives this volume a great advantage over the normal manual presentation of the scholastic position—a presentation often so trite, self-assured and unquestioning as to stimulate little interest in philosophic thought.

Marc situates ethics in its proper order, as the study of human behavior which follows upon investigation of the intellect and will, and the construction of a metaphysics. Thus, in harmony with the Thomistic tradition, ethics is rooted in metaphysics and psychology; however, he does not mention the technical point of the traditional subalternation of ethics to rational psychology. It may be well to attempt a statement of the author's general inspiration in his philosophic work. The study of philosophy centers upon the relations of spirit and being. Starting with an analysis of language as a sign, the author passed on to consider the structure of mental activity, and of the working of the will, concluding, in his first volume, with a discussion of the soul itself. The orientation of these human activities and of the soul itself to reality—the intentional character of spirit, its relation to being is uppermost in the author's view. This study led to a discussion of metaphysics, the notion of being, and of the great theses of that science: the transcendentals, the division and categories of being. In all of this, the mutual relationship and " continuity " of mind and reality is the principle of unity. The objection that Marc considers man only as a spirit, and neglects the substantial unity of body and soul, he himself answers quite adequately. (p. 57) The treatment of ethics begins, in this framework, with a discussion of the nature of this science, and above all an analysis of the act of the will and its intentional character.

The author considers the possible objection of the theologian that a rational, strictly philosophical examination of human activity is condemned at the outset to serious incompleteness by the exclusion of the supernatural—as man's destiny and as present by grace. Marc states, however, that the rational investigation of human acts is a necessary part of human intellectual life and study, and insists upon the fact that this philosophical study does not positively exclude the supernatural, but rather demonstrates the openness of human life and activity to the Creator, so that the ethical problem *devient précisément de déterminer ce que cela engage par rapport à ce qui l'égale et à ce qui le dépasse.* (p. 9) The philosopher establishes the nature and orientation of human activity, and shows its potentialities, deficiencies and aspirations. Indeed, ethics is a fundamental study, providing a solid basis for theological developments, while it, itself, is truly scientific and adequate, for it does attain truth, both speculative and practical. The object, then, of moral philosophy is to establish an

order in truly human actions; it deals with the being of action, of that which man is to create, of which he is to an extent the measure, and points out what is to be done, setting up norms directive of the free act.

Even a summary of the development of thought in this work would far exceed our present limits. The point of importance is to realize the value of Marc's method. Too often, he says, the scholastic takes his fundamental notions "ready-made": *ils acceptent les notions morales, toutes constituées, sans nous donner d'assister à leur naissance. . . .* (p. 39) The need of arriving at and clarifying the meaning of these basic notions is not only stressed by the author, but is, to a noteworthy degree, satisfied by his work. No matter how much one may disagree with some particular points, the outstanding value of this work is precisely to share with the reader a process of thought, the research and dialectic of a philosopher, at home in the world of ideas and reality.

The general movement of this dialectic of action begins with the analysis of the intentional character and finality of the human act. To establish this, the author interrogates and discusses this basic question first of all with Kant, whose reduction of finality to the merely empirical level, made him establish the moral life on the maxims of the pure practical reason, and exclude the teleological approach entirely. Finality, however, is not really reducible to the sensible alone, and rather than deduce it and freedom from the maxim of duty in the "good will," finality is seen as the very form of our action, from an analysis of the intentional character of the human act. The character of deliberation of the free act is "discussed" with Nietzsche and Gide who would prefer purely spontaneous, unexamined action, and hold as an ideal: *Agir sans juger si l'action est bonne ou mauvaise.* (p. 59) In their effort, however, to suppress action for a consciously-sought goal, these thinkers implicitly retain the primacy of finality, since they themselves act for an end in the very attempt to do away with it. From this beginning, the dialectic proceeds upward to the discovery of an ultimate end. This analysis is based on the contrast between the infinity of desire and the "narrowness" of choice. Choice ceases to be "intolerable" when it is seen as aimed at the fullness of being and goodness. The unity of the final end is the conclusion of a long argumentation. The problem of the One and the Many is solved in a final way here, on the plane of action: *Il retrouve, et cette fois pour les résoudre définitivement, tant en théorie que dans la pratique, les antinomies fondamentales due multiple et de l'un, du fini et l'infini. . . .*

The nature of beatitude is seen in the dialectic between hedonism, eudemonism, and Kantian deontology. Marc proceeds to a discussion of the proof for God's existence from the existence of this natural tendency to a final goal, and then examines the question of the natural desire to see God. It will be sufficient here to state that, in the main, he accepts the positions established by P. Roland-Gosselin, O. P., and by P. Motte,

O. P., on these two questions. The author shows especially how the philosophical analysis of these problems leads to the threshold of theology and revelation: *Le Dieu du philosophe et de la raison présage celui du chrétien et du théologien* (p. 263), and should reveal the proper attitude of man as one of expectant submission. (p. 275) The sense and direction of human life and destiny lies here.

The second part of the volume is given over to the nature of morality and of obligation. The examination of finality and freedom lead to a consideration of their rational character, and this character introduces the notion of morality, of the place of right reason and the source of the distinction between the morally right and evil. From the necessity to act, to judge and to decide, springs moral obligation and from the necessity of action, one sees that to act freely and rationally is itself a necessity of action, of human action, since: *cet agir intentionnel et rationnel s'avère nécessarire, puisqu'il se fonde sur une impulsion spontanée à laquelle nous ne pouvons nous soustraire qu'en y recourant toujours, il s'est imposé comme obligatoire* . . . . (p. 522) Just as God, seen as the term of human desire and action concluded the discussion of finality, so now He is seen here as the source of obligation, as the source of an impulsion toward Himself. For though moral obligation can be established without a previous demonstration of God's existence and authority, the fact of moral obligation does lead to God, as to its only source and full explanation.

The synthesis of all these principles is finally found in the moral conscience, the fully-developed practical reason, directing not only the acquisition of virtue, but pointing out to the natural man the real goal of human destiny. The volume ends with this discussion of the moral conscience, its structure and operation, and of the virtues and their individual natures, and functions.

Far better than a mere cataloging of different opinions on the fundamental problems of human activity, the method of Fr. Marc is not only intellectually stimulating, but practically valuable. If " the current confusion in contemporary ethical theories is tragically costly " (T. E. Hill, *Contemporary Ethical Theories,* New York, 1950, p. 2), this volume of analysis and synthesis should contribute not only to the clear vision of the nature and meaning of moral problems, but to their solution—both theoretical and practical. The reading of this volume should stimulate other Thomistic moral philosophers to complete the work begun so auspiciously.

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De L'Existence a L'Etre: La Philosophie de Gabriel Marcel. By Roger Troisfontaines, S. J. Louvain: Nauwelaerts, 1953. Vol. I, pp. 416. Vol. II, pp. 423. $5.20.

The purpose of this searching work, as the author implies, is not to present the thought of Gabriel Marcel, the famous French Catholic existentialist, in logical guise. Such an exposition, if it were to be attempted, would be foreign to the spirit of Marcel's thought, for it would necessitate meticulous tracing out of the rational connections between meditations which, for the most part, have grown out of contingent circumstances and concrete experiences. The resultant rational tissue would be unrecognizable as the thought of Marcel.

Consistent with his refusal to render the thought of the famous philosopher logically consistent the author rejects any tendency to systematize, for the same factors which dissuade him from dialectical clarifications likewise persuade him not to attempt a systematization. The thought of Marcel does not easily fit into the organic form of classic philosophies.

Rather the author intends simply to synthesize the doctrine, which does not of necessity imply rationalization or systematization but only a "putting together." (vol. I, p. 42) In doing this, he affords the reader the advantage of a comprehensive view of the thought of Marcel which springs from many years of experience and intimate living with the profound personal problems of our times.

No one can question the need for some form of synthesis of the work of this thinker in order that the body of professional philosophers, whose personal work lies in other fields, may thereby form an intelligent opinion of his thought. One has but to peruse briefly the list of his various writings, given in the appendix to the second volume, to be convinced of this. They are nearly innumerable, scattered throughout diverse publications, and taking every form from the philosophical essay to literary and dramatic criticism. As such, therefore, they are inaccessible to the average reader, and certainly the interested philosophical public owes the author of these two volumes a debt of gratitude for the obvious labor which went into gathering this dispersed thought into one manageable work.

Of course, the immediate reaction which some readers might feel toward such a work would be not so much gratitude as scepticism based upon their knowledge of the character of Marcel's thought. It would seem impossible to condense his meditations because of their non-systematic nature, arising as they do in varied circumstances and being closely connected with fleeting concrete events. And communication of the thought would seem, to such readers, to be precluded by its highly personal content. For both of these reasons some readers might feel that the efforts of the author were doomed to failure from the beginning, since the synthesis would simply result in cutting away and would destroy the possibility of communicating

the spirit of this philosophy. Perhaps the scepticism will be somewhat allayed by the expressed approval which Marcel gives the work in his preface to the first volume, where he states his satisfaction with the results of Father Troisfontaines' labors, affirming that he would have wished to write the work himself if various personal circumstances had not dissuaded him. The content of the doctrine itself bolsters this generous support.

The doctrine of Gabriel Marcel, though it takes its point of departure in concrete experience, as does the doctrine of all the existentialists, does not exclude, by reason of the singularity and personal content of the experience, synthetic compilation. Quite the contrary, for it unfolds a spiritual process evolving from the singular point of departure which follows a universal pattern, and it can be synthesized in terms of this pattern. (vol. I, p. 44) This the author does by exposing the process and exemplifying it in the most striking meditations of the philosopher. He excludes thereby a vast amount of specific detail but he does not fail to communicate the brain and heart of the body of Marcel's teaching.

A basis of synthesis and communication is found not only in the universality of the spiritual process, manifested consistently in the writings of Marcel from the first beginnings of his philosophical thought, but also to some degree in the personal point of departure insofar as this contains regions of experience common to Marcel and his readers. The author investigates these points of contact, turning the attention of the reader to them, and in that way achieves a vivid communication of the philosopher's teachings. (vol. I, p. 42) Because of his signal success in accomplishing his purpose he well merits the enthusiastic approval of Marcel himself.

The spiritual process, which renders the synthesis possible, involves three stages. In its first stage it is the simple fact of involvement in a situation, the circumstance of existing which is thrust upon a person through birth into the world. He does not choose this situation nor does his liberty in any way constitute its ontological basis.

In its second stage of development the spirit reflects upon the primitive situation in the world and thereby introduces division where there was simplicity. It opposes ego to non-ego; it distinguishes, and thus compares and classifies. Because of the division so created the spirit in this second stage loses contact with the simple datum of the original involvement—with existence—and attains rather a constructed content partly at least of its own fabrication. It therefore, in a sense, destroys existence, the deepest ontological truth of its being. It is not surprising that having suffered this loss the spirit should feel dissatisfied with the second stage of its growth and seek to go beyond it, to recover the simplicity of the point of departure. If it manages to achieve its desire the spirit enters the third and final stage.

The third stage of spiritual evolution transcends the division of the second and thereby regains, in some sense, the simplicity and the existence

of the first. It does this " in some sense " because obviously having passed through the second stage it can never again be exactly the same but must always show the signs of its passage. This final stage, in the terminology of Marcel, is the participation in being, by which term he distinguishes the third stage from the simple fact of existence of the first and from the division operated upon being in the second.

According to the author there are two ways of achieving passage out of the second stage. One way is through aesthetic intuition of transcendent values; and the other is through spiritual aversion for whatever tends to lock the mind into the prison of the second stage. The aesthetic mode of escape, especially in the drama and in music, is manifested by the author in his discussion of Marcel as an individual and as a productive thinker. He indicates, in discussing the personality of the philosopher, that this mode of approach to reality is part of Marcel's nature and a beloved means for him not only to assimilate the experience of others but also to communicate his own. In particular, the author shows, Marcel considers the drama chiefly as a vehicle for assisting another to transcend the limitations of the second stage of spiritual growth. This is the sense of Marcel both in his criticisms of other playwrights and in his own creative work. He gauges the value of the drama from its success in communicating that participation in being which has already been achieved by the creator.

The major portion of the work deals with the achievement of the participation of being by means of spiritual aversion for indequate insights into reality. This subject is introduced in the first chapter of the first volume where an analysis is made of the technocratic view of reality with the purpose of causing the reader to feel a revulsion for it.

The phenomenological study of the technical mentality, with which the author chooses to commence his treatment of Marcel's highly personal thought, introduces the reader with considerable clarity to the sense of movement of this philosophy. Because of its clarity this study has definite advantages as a point of departure for communicating Marcel's thought, though it is not to be taken as the factual or doctrinal point of departure for the personal development of Marcel himself. As an exercise in phenomenological analysis it does not commit itself to an epistemology of reality but simply studies a conceptual content. It does not therefore critically evaluate the mind of the technician nor explain it empirically or philosophically, but simply exposes its intentional structure in order to evoke the experience of nausea and ennui—Marcel's personal reaction toward it—and thereby carry the mind beyond to that which transcends the technological. In doing this it reveals the technological mentality as a type of first reflection upon the situation of man in the world which is, of itself, a block to further progress and which must be regurgitated by the spirit in order to be transcended. The nausea and ennui, deeply personal experiences, which effectuate this are precious for the one who suffers them.

According to the technological mentality, which reflects upon the individual's situation in the world, not only is the world capable of being treated by techniques but it is adequately defined in terms of them. That is to say, it not only thinks that techniques can be validly employed upon nature—manipulating it for definite goals and purposes—but that nature is nothing more than that which is submissive to technology. It considers anything which, by supposition, would lie beyond techniques as simply not real. Such an attitude, jarring when presented so baldly, is nevertheless common although perhaps many times only unconscious. It reveals itself, for example, in the individual who so determines the course of his actions as to manifest in them the expectation of finding an answer to the most profound problems of life in the advance of technical and scientific proficiency.

It is the sense of Marcel's writings that such an attitude toward one's situation in the world can, under critical conditions, result in spiritual nausea, while mental regurgitation serves as a medium for transcending the limits of this inadequate approach to the world. He locates the critical condition for this reaction in the contemplation of the impotency of techniques in certain realms of one's situation in the world. When this fact is faced the contemplator senses the futility of his future totally committed to powerless instruments, and then nausea and ennui overwhelm him.

There are two realms of the situation in the world which, for the intelligent contemplative, clearly escape technique: the achievement of human happiness and the control of death. There is no technique for happiness nor is there a technique for thwarting death. A certain breadth and sensitivity of spirit are required to perceive that this is so, for a dull mind may very well conceive that the advance in science will satisfy completely the deepest human desires. But the penetrating spirit will recognize the truth and feel the pervading dissatisfaction which it causes in the soul. And yet the pain which such dissatisfaction occasions is well worth it to him, since it will confer upon him a true participation in being.

The nausea arising in these conditions teaches the mind that what it has tried to assimilate is an indigestible content, just as bodily nausea teaches the animal what must not be eaten. Spiritual aversion reveals to the soul that it cannot entertain any ideas whatsoever, which for some reason appeal to it, but rather that there is a determined and natural food which it must have and which alone satisfies its longings.

The nausea which arises in the mind attempting to commit itself totally to the technical mentality shows that such a giving of self is contrary to the good of the spirit. When this revulsion factually fails to occur it is because the necessary conditions for it are not realized and the spirit absorbs the poisonous doctrine without sensing any harm. In minimal doses it takes in the toxic substance and gradually succumbs to the resultant

creeping paralysis. But if it consumes the critical dosage revulsion follows and reveals the truth. The spirit then understands that there is another food of contrary quality which it must eat and in understanding this, in the terminology of Marcel, it attains participation in being—the essence of spiritual reality.

Therefore both nausea and despair, which arise in the soul dedicated to technique but aware of its limitations, reveal to us the three stages of spiritual development: 1) a situation in the world; 2) reflection upon this situation conceiving it as nothing more than the technically realizable and through the nausea and despair which this reflection occasions being projected into: 3) the participation in being. Nausea, which springs up in appetite through the perception that the technical mentality does not explain all of reality—not death, for example—reveals that there is a reality beyond that which is intelligible in terms of scientism. Despair, which bears upon the frustration of the possibly achievable—as occurs in a hopeless endeavor, for example, medically to control death—reveals that there is a reality beyond that which is achievable by techniques.

In short, nausea and despair have a knowledge value insofar as they discover for us the three stages of spiritual development. They reveal the spirit to us, in the first stage, as in the world; in the second, a reflecting upon the world and thereby introducing division and opposition, which are overcome by its passage into the third stage of participation in being, where it attains the true essence of spiritual reality. This is the theme of the philosophy of Marcel and the multitude of his writings manifests the infinite possibilities of variations upon it.

The technical mentality, which is the object of nausea in the author's first exemplification of the thought of Marcel, is not, of course, the only source of revulsion nor even the most important. It is merely the easiest to understand for the average reader approaching this doctrine for the first time. The most profound object of spiritual aversion, as the author now proceeds to show, is a false philosophy.

According to Gabriel Marcel the essential defect of a false philosophy, and that by which we detect it, is that it closes the mind in upon itself in the second stage of spiritual growth, thereby making advance to the third stage impossible. For example, the false philosophy of Positivism has the defect of blocking spiritual progress because it claims to comprehend reality empirically—that is, in terms of comparison, measure and classification—and therefore does not allow the mind to pass beyond the second stage where such conceptions are indigenous. It renders participation in being impossible and by this defect we recognize its falseness.

The philosophy of Rationalism also, which pretends to deduce the world from fundamental principles, closes the mind in upon itself in the second stage. It does not answer the problem of contingency nor of liberty, both of which lie outside of rational necessity, but rather it blinds the mind to

the fact that these exist and are not soluble in its terms, so that relative to its methods they present a beyondness and a mystery.

The true philosophy, in contradistinction to these false doctrines, of its very nature facilitates the passage of the spirit into the final stage of participation in being. Taking its point of departure in the concrete world of the philosopher—in conditions beyond his choosing and his control—it so reflects as by the reflection itself to point to the transcendant mystery. True philosophy discovers the existence of the stages of spiritual growth and correctly interprets them both in general and in the variety of specific forms in which they occur. Such a philosophy, Marcel maintains, is not pure contemplation with the thinker facing an object distinct from himself toward which he maintains neutrality but rather it is an involvement and an engagement in which the thinker fuses with the thought object—his own true being.

Once the author has established the essential spirit of the thought of Marcel, as we have endeavored to show, he enters into the specific details: the analysis of the stages of mental growth; the interpretation of the variety of experience possible in the first and second reflections of the second stage; the interpretation of participation in being as found in the third stage. He develops each facet clearly and at considerable length so as to afford a satisfying sampling of Marcel's varied meditations. For the reader who is interested in the details of this philosophy he provides a genuine treasury.

By way of criticism, and briefly, we might admit that the stages of the spiritual growth so prolixly defined by Marcel and so clearly described by the author do factually exist. There is no reason to deny it either in theory or in practice whatever may be our interpretation of its significance. In theory one expects advance and fatigue in all psychical phenomena and therefore one is not surprised to find this law manifested in the broad pattern of human culture, that is to say, one is not surprised to find that the recent history of human thought has proceeded for a while with great enthusiasm and is now, at least for some minds, at a period of fatigue. This simply mirrors the oscillating curve of human activity. For this reason, we need not deny the testimony of the existentialists when they affirm that they have experienced this fatigue.

Therefore, both in theory and in concrete experience, it seems quite justifiable to affirm of the modern spirit that it has: 1) been placed in the world as a first stage of development; 2) has reflected upon this fact in a second stage and through nausea with the world so seen has been projected into; 3) a third stage of intuition of being. Of course, from the standpoint of our traditional doctrine, we would more sharply delineate this third stage as a block intuition of the fundamental falseness of the total world view of the more recent philosophies—Positivism, Rationalism and so forth—based on the ontological fact that these doctrines are

repugnant to human nature, which repugnance has been sensed by the existentialists.

The criticisms, which Marcel levels against Positivism, Empiricism and Rationalism, seem quite acceptable, as far as they go. A scholastic can very well admit that these doctrines exclude from the mind a vast portion of reality, not only in fact, but in principle. He surely would find the criticisms superficial, gauged by the standard of rigorous scholastic methods, but he would nevertheless not find them wrong. But when Marcel applies his censure to all " conceptual " thought as such, then the scholastic must object. Marcel classifies all traditional philosophies as " conceptualizations " and " systematizations " which, he seems to think, puts them on the same level as Positivism and Rationalism, and thereby makes them blocks in the path of the spirit which it must transcend through nausea. He denies for this reason that traditional thought provides insight into true being.

The criticism of Marcel fails here precisely because it is superficial, insofar as it bases its censure on accidental surface qualities, and confused, insofar as it fails to distinguish the specific differences of these many diverse forms of thought, which he characterizes as " conceptual." If he were to make the proper distinctions in the formalities of these modes of thought (difficult enough for him, due to his meager knowledge of scholasticism which he acquired by a few months study when he was forty years old) he would see that the revulsion of his mind for modern thought does not include the ancient doctrine and that for this reason he cannot deny to it a true intuition into being.

The revulsion which Marcel, and for that matter all of the existentialists, stress as fundamental cannot be accepted as the *only* breakout from the prison of modern thought. It is simply one mode of escape, although the conditions of the modern mind may well make it an unusually effective one. It is a subjective means of throwing off the errors of recent thought but there is a far more important objective means in the insights of traditional Thomism. Nausea may cause a person to give up a harmful diet but it will not supply a specific remedy for attaining health. For this, one must depend upon the rational insights of the science of medicine. Spiritual nausea may cause a person to realize that the content of his mind is harmful for him but it will not indicate the specific contents, the positive principles and insights, which the nature of the mind demands. So the spiritual regurgitation of the modern mind teaches it that what it has assimilated as supposedly nourishing food is really indigestible. It knows, through this experience, that it is not totally indetermined in what it may think and how it may orientate its mental life, but rather that nature is quite determined on a particular food and will reject any other. But it cannot, through this revulsion, determine what is the specific food of the mind, nor define the spirit and interpret the significance of spiritual growth. In other words, the sickness of the modern mind is a quite adequate reason

for rejecting a false doctrine, but totally inadequate for constructing or even judging the true doctrine.

The full merit of this fine work will take considerable time and use to determine, but it seems clear, even at this moment, that one of its essential contributions to Thomistic thought will be to point out the significance of the sickness of the modern mind. For it shows clearly that the diet of Scientism and Positivism and Rationalism, which has been the staple food for so many minds during the last four hundred years, results in nausea. Traditional Thomism is justified in looking upon this psychical fact as a confirmation of its persistent attack upon these teachings as a noxious mental content. There now remains for the followers of the Angelic Doctor the task of interpreting accurately the significance of the existentialist aversion and making use of it in the interests of truth.

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The Phenomenology of Moral Experience. By MAURICE MANDELBAUM. Glencoe: The Free Press, 1955. Pp. 338 with indexes. $5.00.

Phenomenological approaches in ethics start from the data of moral consciousness and postulate that solutions to ethical problems be " educed " from, and verified by, direct analysis of individual moral judgments. Phenomenology rules out all prior commitments of a metaphysical, psychological or sociological sort. Such appears to be the procedure in general, from which, however, Dr. Mandelbaum, who is Professor of Philosophy at Dartmouth, somewhat deviates. But before launching his own phenomenological inquiry, he explains in one of the book's most debatable chapters (chapter 1), why he departs from some of the more usual approaches. At the same time he allows that something, even much, can be said for metaphysical, psychological, sociological and phenomenological (dealing with *content*) investigations.

By metaphysical he understands efforts to discover a *summum bonum* or absolute moral standard through reference to reality's ultimate nature. He admits that : " No matter where we start, we must in the end reconcile our conceptions of value and of obligation with what we conceive to be true of the world. In specific instances our normative judgments may unhappily come into conflict with actuality, but we inveterately believe . . . that what is good and what is morally obligatory have their foundations in the underlying properties of being. Only the most violent diremption enables us even to suppose that reality and value are antagonistically related . . . it is fallacious to argue that the metaphysical approach to ethics

is guilty of error in coupling what is ultimately real with what is ultimately valuable." (p. 17)

Such a declaration scarcely prepares one for what he terms the error of the metaphysical approach. "No system of ethics can be validated merely by showing that it is entailed by the nature of ultimate reality. If the system which the metaphysician deduces is not consonant with the judgments of value and obligation which men actually make, no amount of argument will convince us that the system is valid and its metaphysical basis true." (p. 17) Whatever else may be said of this passage, it seems discordant with the author's own warning (p. 243), that "the acceptance of any principle does not in itself guarantee that this principle will, in practice, be successfully applied." Men's actual moral judgments can be shockingly opposed without disproving (or proving) the reality of their metaphysical basis. Furthermore, the issue is not winning people to accept a system but establishing a system they *ought* to accept—whether or not in fact they do.

Questionable also is the generalization that those who adopt the metaphysical approach aim to deduce, and thus validate, only those judgments of value and obligation which they find to be ultimately justifiable. Such a process, the author thinks, is permeated by an initial distinction between the enlightened and the unenlightened moral consciousness—and is basically fallacious. Probably it is a *petitio principii*, if it occurs always as the author describes it. But is it true that *every* metaphysical approach begins with distinguishing the enlightened from the unenlightened moral consciousness? Surely some that merit being called metaphysical do not begin with moral consciousness at all but with efforts to understand existence and human destiny. It is worth noting, perhaps, that Dr. Mandelbaum appears not to be rejecting the metaphysical approach absolutely. He foresees some advantages in it—if it can be united with an unbiased investigation of the data of man's moral consciousness. And he does not deny this possibility. His final judgment is that the metaphysical approach is "imprudent"—a word referring more properly to a system's practical feasibility than to its truth.

Quite rightly the author allows that psychological and sociological approaches to ethical problems can make valuable contributions; but he disallows them when, instead of being used collaterally, they serve as first approaches. There is, he writes, "no more reason to suppose that an adequate psychology of the causal factors involved in moral judgments would eliminate praise and blame, than to suppose that an understanding of the causes of color-vision would alter the colors which we actually see." (p. 25) As for sociology, he emphasizes that it is not an independent method and that a genuine "*science des mœurs*" cannot be conceived in merely sociological terms.

Singly and collectively, Dr. Mandelbaum holds, metaphysical, psycho-

logical and sociological approaches are to be rejected: first, because they are inadequate and then because they fail to match phenomenology's promise and fulfillment.

Standard phenomenological procedure, according to the author, treats moral judgments *contentually;* it focuses on *what* is asserted. Departing from this position, Dr. Mandelbaum abstracts from content. He aims to discover *generic, structural properties* of moral judgments. He is not concerned, at least in the beginning, with truth or falsity, validity, or invalidity. Only after he has satisfied himself about *what moral judgments have in common* (structurally, not contentually—chapters 2, 3, 4), does he take up moral controversies and their resolution (chapters 5 and 6).

Whether or not the author justifies his phenomenological method of educing ethical principles normative and universal enough to separate true from false judgments can be seriously doubted. There is no question, however, that his analysis of moral judgments is original and informing.

Direct moral judgments (chapter 2) manifest the phenomenon of a "reflex" or "objective" demand which is experienced as levelled against the person apprehending it. This *demand,* as reflex and objective, the author holds to be the inexpungeable element in our own experience as well as furnishing the foundation for any theory capable of explaining man's consciousness of his obligations. This may be admitted, without at all agreeing, however, with his statement (p. 53), that he finds no fundamental difference between the element of demand he experiences when he feels he ought to weed his garden or tidy his desk and when he feels he ought to keep his pledged word.

This is difficult to understand, coming from an author who seems so set against idealism and subjectivism and who stresses as he does the objectivity of demands which issue in feeling moral obligation. We experience *pressure,* as he calls it (pp. 55-56), to help a man with his stalled car, and this pressure is no less real than *pressure* of being hungry or angry. Apparently only *pressures* of feeling obliged to help others are considered objective; for the author calls the feeling that I ought to eat subjective. However, later on (pp. 90-91) he explains that while we feel obligated to promote the pleasure of others but not our own, nonetheless we do feel other obligations to ourselves. These "so-called duties to ourselves are to be understood, not in terms of the particular good consequences which they promote, but in terms of their relation to an ideal." And ideals, he insists, do not operate upon us in the form of subjective wishes but as something which appears inherently good and the source of demand upon us.

Dr. Mandelbaum contends that we never feel moral obligation unless we feel some objective demand. We do not, he writes, "feel any obligation to fulfill a desire which we experience as being 'subjective' in character, that is, as being something which we want merely because we want it.

In order to feel an obligation to satisfy one's desire, the fulfillment of that desire must be seen as a means to some further end which itself appears as 'objectively good,' that is, as good independently of one's preference for it. It is not what I prefer, (he distinguishes 'duty' clearly from 'interest') what I wish, or what I want, which appears as my duty; duty appears as objective, as independent of preference, inclination, or desire." (p. 57)

All this emphasis upon objective demand is appealing; but it is really secondary to the question of what constitutes the basis for this demand, or moral obligation. The author answers (pp. 91-92), that it is apprehended *fittingness* of one rather than the other of envisioned but incompatible demands. But when one persists and asks what this *fittingness* is or how it is defined, the author repeatedly says it is indefinable.

If this is so, then however laudable may be his analysis and welcome his rejection of idealism, utilitarianism and systems of morality based on consequences (which he calls "teleological"), and in spite of his efforts to explain *fittingness* ostensively and to take the over-all situation and action into account—in spite of all this it seems that the author's imposing vehicle of phenomenology has taken us down a dead-end street.

Nor is the hopelessness of the impasse ameliorated in Dr. Mandelbaum's explorations of what he calls *removed moral judgments* (chapter 3). These are judgments of moral rightness and wrongness made by an observer . . . or by ourselves as observers of our own *past* action. Although the author indicates important differences between removed and direct moral judgments, nothing issues from his analysis to clarify or give body to the critically important concept of *fittingness,* which underpins *objective demand,* which in turn is the essential note of moral obligation.

There is a radical shift in perspective from moral judgments of the direct and removed type to Dr. Mandelbaum's third classification. *Judgments of moral worth* (chapter 4) predicate goodness or badness not of action but of some attribute of a person's character or even of his character as a whole. To those who object that it is wrong to judge another person's character, the author replies that he is not dealing with judgments men *should* make but with those that *are made.* But he goes beyond this, and seems to justify such judgments under certain conditions. (p. 178) Yet he writes (pp. 180-181): ". . . the rightness or wrongness of an action which we see a person perform does not serve as the ground for our judgments of moral worth" (of the agent or some of his attributes) . . . . "Furthermore, it is also clear that our judgments of moral worth do not serve as the ground for our judgments of rightness and wrongness . . . we do not base our judgment of the rightness or wrongness of an action on the moral worth of the trait of character which that action reveals."

Turning from generic considerations of moral judgments to content, the author makes no effort to minimize the fact of controversies. He does,

however, categorically deny that ethical differences disprove the existence of a valid standard for assaying moral judgments. (p. 184) He then proceeds to examine and classify the sources of controversy (chapter 5).

Conflicting moral judgments may be *disagreements, disparities* or *divergences. Disagreement* labels disputes in which differing conclusions are reached even though the disputants agree on the non-moral aspects of the situation. *Disparities* arise simply because matters of fact are differently apprehended. *Divergences* occur when one person's moral judgment has no counterpart in another's moral judgments. For example—referring to the same action, one man may consider *its* rightness or wrongness while another passes judgment on the *agent's* moral worth. Theoretically, *disparities* should be eliminated by getting the facts straight, and *divergences* should be smoothed out if the parties realized their judgments were of different types. The difficulty is in practice; *divergences* and *disparities* are likely to involve or devolve into genuine *disagreements.* Emotions, sentiments, personal characteristic, Dr. Mandelbaum acknowledges as affecting moral judgments; but they are no more primary sources of controversies about morals than they are primary sources of moral judgments themselves.

The author's analysis of moral controversies is one of the book's most satisfactory sections. His conclusion is that there " is probably no fundamental, irreducible heterogeneity in the moral experience of different persons, whether they be members of the same or of different societies." (p. 234) But he is referring, it should be remarked, to generic sources of conflict. He still has to cope with situations of genuine moral *disagreements,* which he admits sometimes cannot be solved without facing the question of whether there is or is not a single obligatory and universal standard of conduct. Earlier in the work (p. 185) he had conceded that he did not think it possible to reach this final goal, i. e., of ascertaining such a standard. Now in the book's final chapter and after labyrinthine analyses he confesses (p. 239) that they have not given a clue to any such absolute, discoverable standard. They have not revealed a criterion to estimate more adequate from less adequate moral judgments. Yet Dr. Mandelbaum is fully aware that this is the " crucial problem," a " basic issue for any theory which deals with normative ethics." (p. 241)

It seems fair to anticipate that the author will produce some solution to this crucial problem, and the success of his work may well be measured in terms of this solution.

He proposes three principles for which he claims only that, singly and collectively, they will solve some but not all moral controversies. *Primacy of facts* he mentions first. It means that disputants should have a just regard for facts. Moral judgments are invalid if they originate from anything other than a person's apprehension of the properties of what he asserts to be worthy of praise or blame. Pride, sympathy, self-interest

may distort one's conception of the facts and so invalidate moral judgment. More important is the *principle of universality*. It states that to be valid moral judgments must not restricted by reference to special conditions. Notice that the author limits " universality " to a *claim* made for universal acknowledgment. For he warns (p. 263) that the question of the validity of moral judgments cannot be decided in terms of the truth-value assigned to them nor in terms of a universality of agreement among persons making such judgments. Third is the *principle of ultimacy*. It signifies that " any moral judgment which is believed to be valid is incorrigible, and any incorrigible moral judgment must be acknowledged to be binding upon thought and upon action." (p. 277) It echoes the familiar axiom, that a man in good faith must follow his convictions about right and wrong. But obviously, this relates to his *responsibility* and not to the moral character of the *action* involved. The author seems aware of this, since he says that he does not contend that we should affirm what the agent apprehends as right or as wrong *is* right or wrong. " I can say that X would have been the right action for the agent to take, had he *not* thought it wrong without overthrowing my own judgment that a contrary action Y was the objectively right action which he should have seen to be right." (p. 289)

The principles of the *primacy of facts* and of *universality* will settle some controversies; but they will not, to quote the author, solve them all. Some persons may consistently espouse alternative ways of structuring moral situations and consistently hold that certain types of action do or do not have moral goodness. When this occurs, Dr. Mandelbaum says, we have reached the end of any justifiable moral controversy. " If anyone," he writes, " wishes to establish that there is a universally valid contentual standard for conduct, applicable to all persons and in all cultures, he must empirically show that this standard is implicit in every moral judgment which any person is willing to be consistent in affirming. The evidence that such is the case is not, I believe, available. And even were it to be established we should still have to admit that it would be theoretically possible that such should not always be the case." (p. 307)

This conclusion, the author himself labels as sceptical—and there is emphatically every reason to take his word for it. Yet he thinks his long argument has produced other conclusions relevant to the traditional problems of normative ethics, which make it possible to say something at least about men's actual moral obligations. We can say that men must act as their sense of moral obligation dictates, and that this sense of obligation must be sharpened by dogged self-criticism, informed by a conscientious appraisal of the facts involved and he capable of being consistently espoused. (p. 308) Negatively, man must avoid the pitfall of self-deception, which, said Bishop Butler, is a corruption of the whole moral character in its principle.

This is an earnest book, competently reasoned and modestly expressed,

rich in valuable and praiseworthy material. The author's approval or pejorative criticism often lends considerable phenomenological support to ethics inspired by objective and universal criteria of contentual validity and right moral conduct. He refreshingly restates some old truths and effectively uses modern psychology and sociology. His charges against metaphysical, or absolutist, systems deserve serious study. He reacts wisely to the weaknesses of relativism, idealism, subjectivism, utilitarianism, and all attempts to measure morality by consequences or statistics. As a perspicacious exposition of phenomenology, Dr. Mandelbaum's work is remarkable. Because it succeeds so well in this regard and so cogently follows its argument to grim and futile scepticism, some readers may regard the book as a trenchant indictment of phenomenology in general and of the author's method in particular.

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BRIEF NOTICES

Summa of the Christian Life. By Louis of Granada. Translated by Jordan Aumann, O. P. St. Louis: Herder, 1954. Vol. I, pp. 321. $4.00. Vol. II, pp. 235. $4.50.

Not the least interesting part of this work is the long historical introduction by Fr. Alvaro Huerga, O. P. which provides a magnificent synthesis of the life and works of Louis of Granada, the humble Dominican friar who was born at Granada in 1505 and whose ascetical writings are known and loved throughout the whole world.

Louis was received into the Dominican Order at Granada in 1524. Later he was sent to the famous College of St. Gregory, Valladolid, celebrated for the brilliance of its students and professors. Although admirably fitted for the life of teaching, Louis' ambition was to be a missionary in the New World; but his superiors provided otherwise, and his true vocation as a spiritual writer and preacher developed. His first venture was a small tract on the method of prayer which was sent to a student of St. Gregory, Valladolid—a work which was later to become the famous *Libro de la Oracion y Meditacion.* His fame grew to such an extent that he was given permission to preach anywhere in Spain.

In 1551 we find him in Portugal, and here, apart from a few short visits to Spain, he was to live, work and die. He became Provincial of the Portuguese province of the Order in 1556 and also confessor to the Queen Regent. However, at heart he was still a humble friar and neither praise nor blame, success or failure ever moved him; rather his spirituality grows more mature under trials while his writing seems to acquire greater clarity and precision.

The best known of his works are *The Sinner's Guide, The Book of Meditation and Prayer, The Memorial of the Christian Life,* and the *Introduction to the Creed,* a gigantic work written during the last years of his life but still redolent of the spirit of youth. There are over forty-nine authentic works of Granada extant—a surprising thing when we remember that he did not begin his career as an author until nearly fifty years of age, writing on spiritual theology, on apologetics, hagiography and sacred eloquence, apart from translating works by other authors into Spanish.

His influence as a spiritual writer both in Spain and other countries possibly may be explained by the fact that he appeals to all classes in the Christian community, but it is not the whole explanation. Nor can it be attributed merely to the beauty and purity of his style—and one must admit that his work possesses both qualities, especially in the original Spanish. The real explanation lies deeper. First of all, his doctrine is always

solid, being based on Sacred Scripture, the Fathers, and Saint Thomas Aquinas. Secondly, the main theme of his writings—the Pauline idea that the Christian lives in and for Christ—is the mainspring of all spirituality worthy of the name. This theme Granada develops through a series of graded steps which anyone can follow. What is more, he appeals not merely to the intellect but also to the will. The result is a spiritual synthesis clothed in simple yet beautiful language which has a universal appeal.

The *Summa of the Christian Life* contains a selection taken from Granada's writings and arranged in the order of the questions in the *Summa* of St. Thomas. The idea of using the *Summa* as a framework for the writings of Granada was conceived by Fr. Antonio Trancho, O. P., who was executed by the Communists in the early days of the Spanish Civil War, and was finally brought to completion by Msgr. Francisco Barbado, O. P., Bishop of Salamanca.

Apart from the long historical introduction, of which we have given a summary, the first volume contains twenty-eight chapters of selections from Granada's writings. These treat in general of the existence and nature of God, the Trinity, creation and the wonders of the universe. Even in translation the author's appeal makes itself felt. In treating of God's perfection, for example, we see the cold light of reason taking us step by step towards the inevitable conclusion that God must be infinite in all His perfections; yet this reasoning is achieved in such a way that the will is led to prayerful adoration at the same time. The section on the wonders of creation throws yet another light on the author, because here we see a man who must have known and loved the world around him as few of his contemporaries did.

The second volume contains three sections dealing with the quest for happiness, the theological virtues, and moral virtues. This volume reveals even more clearly than the first the spiritual value of Louis of Granada for those living in the modern world. The highlights of this second volume are the chapters on sin and the means of freeing ourselves from its dominion, divine grace, charity, the path to holiness, the virtue of religion, vocal and mental prayer, humility and pride.

This work surely deserves to be an outstanding success on its own merits since it is written by the greatest of all Dominican ascetical writers and is admirably adapted for present-day needs. The extracts have been admirably chosen and the translation has been well done, doing justice to the original.

The Indwelling of the Trinity. By Francis L. B. Cunningham, O. P. Dubuque: The Priory Press, 1955. Pp. 31 with indexes. $7.50.

"If anyone loves Me, he will keep My word; and My Father will love him, and We will come to him and make Our abode with him" (John 14:23). The wonderful promise contained in these words of Our Lord, that the soul who loves God will be rewarded with a special presence of the Father and the Son (from other passages, we know that the Holy Spirit is included), forms the subject matter of this excellent work by Father Cunningham. Its appearance is timely, for much is being written on the subject by authors who depart from the traditional view and seek support in the text of St. Thomas.

The author has sharply defined his intention: "To be able to explain how the Trinity comes to abide in the just, in what way the new relationship is constituted, where the precise newness of the presence is found, what are the respective roles played by created and uncreated grace—this is to give the *formal reason* of the divine indwelling." (p. 10)

The author is convinced that the profoundest explanation is to be found in the teaching of St. Thomas. But an obstacle arises here: it is frequently said that St. Thomas changed his position during the course of his writings. In order to clarify this difficulty, Fr. Cunningham has, with commendable diligence, traced the elements of St. Thomas' teaching to his predecessors and contemporaries. It turns out that the principal sources of the Angelic Doctor are the *Summa fratris Alexandri,* the *Commentary* of St. Albert, and (possibly for the *Scriptum super Sententias,* probably for the *Summa Theologiae*) the *Commentary* of St. Bonaventure. The author clearly demonstrates that St. Thomas is following Alexander (with an important exception) and not St. Albert, whose position he actually refutes.

There is no doubt that the presence of the Trinity promised by Our Lord is a special presence, a new presence, a real presence of the three Divine Persons, not as separate, but as distinct. The problem, then, is to determine the formal reason for this new presence. Some few theologians are tempted to seek an answer in a special activity of the Persons. This position goes contrary to the universally held principle that all extra-Trinitarian operations are common to the Three Persons. Hence, if this is a new presence, the newness must be on the part of the creature. Other theologians reduce the formal reason to appropriation: all three Persons produce effects of grace in the soul, which effects, by appropriation, contain a likeness of one Person. While appropriation enters into the Thomistic solution, it is insufficient to explain the realism of the presence traditionally upheld. Hence, St. Thomas' explanation is in the intentional order: the three Divine Persons are present (in the effects of grace, certainly) as objects of knowledge and love. Or, as Fr. Cunningham summarizes it: "Manifestation, in the eyes of the Angelic Doctor, means not only the representation of the

Persons in their gifts but the quasi-experimental knowledge of the Persons represented in Their gifts by virtue of these gifts. And this, if not the knowledge of the Beatific Vision, an immediate thinking of God without reasoning process, and a direct contact with the Persons as distinct and as really present."

This scholarly work is the first volume issued by a new publishing house, The Priory Press, established by the Dominican Fathers of St. Albert's Province, at their House of Studies in Dubuque, Iowa. The format of the book, the printing, the design of the cover, all bear testimony to the high quality of work that we may expect from this new publishing venture.

Fortitude and Temperance. By Josef Pieper. Translated by Daniel F. Coogan. New York: Pantheon, 1954. Pp. 128. $2.75.

This little book is a series of essays on the last two cardinal virtues which the author believes have been especially misunderstood by enlightened liberalism. The introduction disclaims any originality of thought while boasting that every sentence may be documented from the works of St. Thomas. Despite the disclaimer, there are many penetrating insights into the meaning of St. Thomas which will be quite valuable to those familiar with the actual text. Indeed, for any adequate comprehension of fortitude and temperance, the text of the *Summa* would be absolutely necessary. The reasons for this are the present author's preoccupations with his special object. The very character of the essay precludes a full exposition of the subject such as might be found in a scientific monograph or text book. Besides, the author is admittedly concerned with an explanation to the liberals rather than a pure explanation. This means that he isolates certain matters which he regards as important or as neglected by modern thinkers.

Accordingly, fortitude itself is discussed in four brief chapters besides the introductory chapter, but there is no special consideration of its potential parts. This is somewhat disappointing for certainly patience and magnanimity are of great importance in themselves as well as being excellent preliminary skirmishes in preparation for the virtue Professor Pieper describes as "readiness to fall in battle." Temperance is treated at greater length, with the more important of its potential parts, in nine essays. There is so much that is good here that one wishes the author had resisted the current fashion of mock-scandal at the so-called Manicheism, Puritanism or prurience of some of the standard manuals of moral theology. While many of these undoubtedly have their defects, the number and gravity of failings are considerably reduced when their object is considered, that is, that they are not written for the general public but for those who are to have the care of souls in the Sacrament of Penance.

Natural Law and Natural Rights. Studies in Jurisprudence, II. Dallas: Southern Methodist University Press, 1955. Pp. 106 with index. $3.00.

This small volume contains four essays on varying aspects of natural right and natural law presented at the 1954 Conference on Law in Society held at the Southern Methodist University. These studies represent a further development of the issues raised in the essays presented at the 1953 conference and which were published under the title " Origins of the Natural Law."

Mr. Outler, Professor of Theology at the University, makes a rapid examination of some of the concepts of human rights and obligations to be found in the teachings of classical Protestant authorities from Luther to Puffendorf. As the title of this essay wisely implies, the author refrains from discussing natural law concepts in the sense of immutable rights and duties.

Professor Scott-Craig argues that Locke stands for the " golden mean " between the extremist defenders of natural law and the extremist proponents of natural right, and that he was trying " to free the tradition of Natural Law by more reliance on Natural Right, to effect a better synthesis of a religious tradition in which we have ultimately no rights but only gifts and blessings and retractable privileges issuing from a sovereign divine person, and a secular tradition of sovereign principles to which we can appeal."

Theories of natural law and natural right are criticized from the point of view of modern pragmatism by Professor Patterson, the Cardozo Professor of Jurisprudence in Columbia University. The author concludes that the traditional theories of natural law and natural right are inadequate to meet the need for ethical legal idealism today; " at best they can provide rhetorical support for conclusions derived from other grounds or by other methods."

In the final essay Professor Harding, noting the recent increase in interest in the natural law, sets out several sound caveats for lawyers who desire to study natural law. However, his characterization of the scholarly neo-scholastic criticism of the philosophy of Mr. Justice Holmes as " vicious " is certainly incorrect. These stimulating essays call to mind Etienne Gilson's comment: " The natural law always buries its undertakers."

The Age of Belief. By ANNE FREMANTLE. Boston: Houghton Mifflin, 1955. Pp. 218 with index. $2.75.

This work comprises the first volume of a projected series of six devoted to the general subject: *The Great Ages of Western Philosophy*. In it the author, at one time lecturer in creative writing at Fordham University, strives to reproduce the wisdom of the Middle Ages from Augustine to William of Ockham. Her main purpose is to present a source book " with the emphasis on the original texts " so that one can conceive a concise and correct idea of Western European Philosophy as it developed between the fifth and fifteenth centuries. The selected texts are interspersed with " explanatory " remarks and " interpretative " commentary.

Due to the efforts of such eminent scholars as Gilson, Boehner, Grabmann, DeWulf, and others much interest has been stimulated regarding this period; and for some time there has been felt a need for a series of readings from primary sources that would serve as a tool for an intelligent understanding of the problems of the mind proposed and solved during the years of medieval expansion. Unfortunately, the present volume does little to satisfy this need. Slightly more than half of work is devoted to primary texts, the texts chosen are too narrow in over-all scope and too loosely related to give an adequate view of many of the problems, and finally the interpretative liaisons made by the author often tend to enshroud the basic problem and its solution. In view of these defects, it would seem that the book does not quite adaquately satisfy the rigorous demands of a source book.

BOOKS RECEIVED

Baierl, Joseph J. *The Catholic Church and the Modern State.* Rochester: St. Bernard Seminary, 1955. Pp. 243 with index. $4.50.

Battaglia, Felice. (tr. by M. L. Roure). *La Valeur dans L'Histoire.* Paris: Aubier, 1955. Pp. 206. Fr. 525.

Boekraad, A. J. *The Personal Conquest of Truth According to J. H. Newman.* Louvain: E. Nauwelaerts, 1955. Pp. 327 with index. $3.50.

Bonforte, John. *The Philosophy of Epictetus.* New York: Philosophical Library, 1955. Pp. 160. $3.00.

Bouyer, Louis. (tr. by K. Pond). *The Meaning of the Monastic Life.* New York: Kenedy, 1955. Pp. 219. $4.00.

Buchler, Justus. *Nature and Judgment.* New York: Columbia University Press, 1955. Pp. 218 with index. $3.75.

Butler, O. P., Richard. *The Mind of Santayana.* Chicago: Regnery, 1955. Pp. 248 with index. $4.00.

Cameron, Viola M. *God's Plan and Man's Destiny.* Philadelphia: Presbyterian & Reformed, 1955. Pp. 160. $1.80.

Combes, André. *Saint Therese and Her Mission.* New York: Kenedy, 1955. Pp. 254. $3.50.

Copleston, S. J., F. C. *Aquinas.* Baltimore: Penguin, 1955. Pp. 263. $0.85.

Dooyeweerd, Herman. (tr. D. H. Freeman and H. DeJonste). *A New Critique of Theoretical Thought, Vol. II.* Philadelphia: Presbyterian & Reformed, 1955. Pp. 625. $36.00 per set of IV Vols.

Farrell, O. P., Walter and Hughes, O. P., Dominic. *Swift Victory.* New York: Sheed & Ward, 1955. Pp. 211. $3.25.

Grindel, C. M., Carl W. *Concept of Freedom.* Chicago: Regnery, 1955. Pp. 524. $10.00.

Hanke, Lewis and Fernandez, Manuel. *Bartolomé de las Casas.* Santiago: Fondo Historico y Bibliografico José Torobio Medina, 1954. Pp. 431 with indexes.

Huant, Ernest. *Le "Credo" de Jean Rostand.* Turin: Desclée, 1955. Pp. 103.

Jung, C. G. and Pauli, W. *The Interpretation of Nature and the Psyche.* New York: Pantheon, 1955. Pp. 254 with index. $3.00.

Koren, C. S. Sp., Henry J. *Introduction to the Philosophy of Animate Nature.* St. Louis: Herder, 1955. Pp. 354 with indexes. $4.75.

———. *Introduction to the Science of Metaphysics.* St. Louis: Herder, 1955. Pp. 310 with index. $4.50.

Lamont, W. D., *The Value Judgment*. New York: Philosophical Library, 1955. Pp. 360 with index. $6.00.

Lazerowitz, Morris. *The Structure of Metaphysics*. New York: Humanities Press, 1955. Pp. 293 with index. $5.00.

Lecomte du Nüoy, Mary. *The Road to "Human Destiny."* New York: Longmans, Green, 1955. Pp. 344 with index. $5.00.

Lewis, Clarence Irving. *The Ground and Nature of the Right*. New York: Columbia University Press, 1955. Pp. 103. $2.50.

Masure, Eugene. (tr. by Angeline Bouchard). *Parish Priest*. Chicago: Fides, 1955. Pp. 276. $3.95.

Mauriac, François. (tr. by Edw. H. Flannery). *Words of Faith*. New York: Philosophical Library, 1955. Pp. 118. $2.75.

Oesterreicher, John M. (ed.). *The Bridge. A Yearbook of Judeo-Christian Studies, I*. New York: Pantheon, 1955. Pp. 349. $3.95.

Ottaviano, Carmelo. *Metafisica dell'Essere*. Naples: Rondinella, 1955. Par. I, pp. 875. L. 3000. Par. II, pp. 745 with index. L. 3000.

Paton, H. J. *The Modern Predicament*. New York: Macmillan, 1955. Pp. 405 with index. $5.25.

Pernoud, Regine. (tr. by J. M. Cohen). *The Retrial of Joan of Arc*. New York: Harcourt, Brace, 1955. Pp. 276. $4.75.

Proceedings of the American Catholic Philosophical Association, 1955. Knowledge and Expression. Washington, D. C.: Catholic University Press, 1955. Pp. 313. $3.50.

Raphael, D. Daiches. *Moral Judgment*. New York: Macmillan, 1955. Pp. 224 with index. $2.75.

Roos, S. J., H. (tr. by André Renard, O. S. B.). *Kierkegaard et le Catholicisme*. Louvain: Neuwelaerts, 1955. Pp. 92. $0.96.

S. Thomae Aquinatis. *In Librum de Causis Expositio*. Cura et studio Ceslai Pra, O. P. Turin: Marietti, 1955. Pp. 231 with index.

———. *In Aristotelis Libros Peri Hermeneias et Posteriorum Analyticorum Expositio*. Cura et studio Raymundi M. Spiazzi, O. P. Turin: Marietti, 1955. Pp. 457 with index.

Thonnard, A. A., F. J. (tr. by Edw. A. Maziarz, C. PP. S.). *A Short History of Philosophy*. New York: Desclée, 1955. Pp. 1084 with index. $6.50.

Toulemont, René. *Sociologique et Pluralisme Dialectique*. Louvain: Nauwelaerts, 1955. Pp. 276. $2.40.

Wild, John. *The Challenge of Existentialism*. Bloomington: Indiana University Press, 1955. Pp. 304 with index. $6.00.

Winn, Ralph B. *American Philosophy*. New York: Philosophical Library, 1955. Pp. 336 with index. $6.00.